

APPLICATION FOR FEDERAL ASSISTANCE SF-424

Version 02

1. Type of Submission:

- ☐ Preapplication  
☒ Application  
☐ Changed/Corrected Application

2. Type of Application:

- ☐ New  
☒ Continuation  
☐ Revision

If Revision, select appropriate letter(s)

Other (specify):

3. Date Received

06/21/2013

4. Applicant Identifier:

5a. Fed Entity Identifier:

5b. Federal Award Identifier:

DE-EE0006159

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

a. Legal Name: Maryland, State of

b. Employer/Taxpayer Identification Number (EIN/TIN):

526002033

c. Organizational DUNS:

028492598

d. Address:

Street 1: 7800 Harkins Road

Street 2:

City: New Carrollton

County: PRINCE GEORGE'S County

State: MD

Province:

Country: U.S.A.

Zip / Postal Code: 20706

e. Organizational Unit:

Department Name:

Department of Housing and Community Development

Division Name:

Division of Development Finance

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: Mr First Name: John

Middle Name:

Last Name: Mello

Suffix:

Title: Deputy Director

Organizational Affiliation:

Telephone Number: 3014297790

Fax Number:

Email: John.Mello@maryland.gov

**APPLICATION FOR FEDERAL ASSISTANCE SF-424**

Version 02

**9. Type of Applicant:**

A State Government

**10. Name of Federal Agency:**

U. S. Department of Energy

**11. Catalog of Federal Domestic Assistance Number:**

81.042

CFDA Title:

Weatherization Assistance Program

**12. Funding Opportunity Number:**

DE-WAP-0002015

Title:

2015 Weatherization Assistance Funding Opportunity

**13. Competition Identification Number:**

Title:

**14. Areas Affected by Project (Cities, Counties, States, etc.):**

Statewide

**15. Descriptive Title of Applicant's Project:**

Maryland has participated in the U. S. Department of Energy's (DOE) Weatherization Assistance Program for 30+ years. The Maryland Weatherization Assistance Program enables low-income families to permanently reduce their energy bills by making their homes more energy efficient.

**APPLICATION FOR FEDERAL ASSISTANCE SF-424**

Version 02

**16. Congressional District Of:**

a. Applicant: Maryland Congressional District 01

b. Program/Project: MD-01

Attach an additional list of Program/Project Congressional Districts if needed:

**17. Proposed Project:**

a. Start Date: 07/01/2015

b. End Date: 06/30/2016

**18. Estimated Funding (\$):**

a. Federal	2,259,316.00
b. Applicant	0.00
c. State	0.00
d. Local	0.00
e. Other	0.00
f. Program Income	0.00
g. TOTAL	2,259,316.00

**19. Is Application subject to Review By State Under Executive Order 12372 Process?:**

☐ a. This application was made available to the State under the Executive Order 12372 Process for review on:

☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☒ c. Program is not covered by E.O. 12372

**20. Is the applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation)**

No

21. By signing this application, I certify (1) to the statements contained in the list of certifications\*\* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances\*\* and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code Title 218, Section 1001)

☒ I AGREE

\*\* The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

**Authorized Representative:**

Prefix: Mr First Name: Kenneth

Middle Name:

Last Name: Holt

Suffix:

Title: Secretary

Telephone Number: 3014297452

Fax Number:

Email: Kenneth.Holt@maryland.gov

Signature of Authorized Representative: Signed Electronically

Date Signed: 04/14/2015

Authorized for Local Reproduction

Standard Form 424 (Revised 10/2005)  
Prescribed by OMB Circular A-102

**BUDGET INFORMATION - Non-Construction Programs**

1. Program/Project Identification No. EE0006159		2. Program/Project Title Weatherization Assistance Program	
3. Name and Address Maryland, State of 7800 Harkins Road New Carrollton, MD 20706		4. Program/Project Start Date 07/01/2015	5. Completion Date 06/30/2016

**SECTION A - BUDGET SUMMARY**

Grant Program Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DOE	81.042	\$ 2,478,017.00		\$ 2,259,316.00		\$ 4,737,333.00
2.						
3.						
4.						
5. TOTAL		\$ 2,478,017.00	\$ 0.00	\$ 2,259,316.00	\$ 0.00	\$ 4,737,333.00

**SECTION B - BUDGET CATEGORIES**

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) GRANTEE ADMINISTR ATION	(2) SUBGRANTE E ADMINISTR	(3) GRANTEE T&TA	(4) SUBGRANT EE T&TA	
a. Personnel	\$ 147,240.00	\$ 0.00	\$ 40,761.00	\$ 0.00	\$ 188,001.00
b. Benefits	\$ 57,726.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 57,726.00
c. Travel	\$ 24,000.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 24,000.00
d. Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
e. Supplies	\$ 3,650.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 3,650.00
f. Contract	\$ 0.00	\$ 274,411.00	\$ 59,278.00	\$ 722,929.00	\$ 4,459,706.00
g. Construction	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
h. Other	\$ 4,250.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 4,250.00
i. Total Direct Charges	\$ 236,866.00	\$ 274,411.00	\$ 100,039.00	\$ 722,929.00	\$ 4,737,333.00
j. Indirect	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
k. Totals	\$ 236,866.00	\$ 274,411.00	\$ 100,039.00	\$ 722,929.00	\$ 4,737,333.00
7. Program Income	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

**BUDGET INFORMATION - Non-Construction Programs**

1. Program/Project Identification No. EE0006159		2. Program/Project Title Weatherization Assistance Program	
3. Name and Address Maryland, State of 7800 Harkins Road New Carrollton, MD 20706		4. Program/Project Start Date 07/01/2015	5. Completion Date 06/30/2016

SECTION A - BUDGET SUMMARY						
Grant Program Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.						
2.						
3.						
4.						
5. TOTAL		\$ 2,478,017.00	\$ 0.00	\$ 2,259,316.00	\$ 0.00	\$ 4,737,333.00

SECTION B - BUDGET CATEGORIES					
6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) PROGRAM OPERATION S	(2) HEALTH AND SAFETY	(3)	(4)	
a. Personnel	\$ 0.00	\$ 0.00			\$ 188,001.00
b. Benefits	\$ 0.00	\$ 0.00			\$ 57,726.00
c. Travel	\$ 0.00	\$ 0.00			\$ 24,000.00
d. Equipment	\$ 0.00	\$ 0.00			\$ 0.00
e. Supplies	\$ 0.00	\$ 0.00			\$ 3,650.00
f. Contract	\$ 3,081,648.00	\$ 321,440.00			\$ 4,459,706.00
g. Construction	\$ 0.00	\$ 0.00			\$ 0.00
h. Other	\$ 0.00	\$ 0.00			\$ 4,250.00
i. Total Direct Charges	\$ 3,081,648.00	\$ 321,440.00			\$ 4,737,333.00
j. Indirect	\$ 0.00	\$ 0.00			\$ 0.00
k. Totals	\$ 3,081,648.00	\$ 321,440.00			\$ 4,737,333.00
7. Program Income	\$ 0.00	\$ 0.00			\$ 0.00

**U.S. Department of Energy  
WEATHERIZATION ASSISTANCE PROGRAM (WAP)  
WEATHERIZATION ANNUAL FILE WORKSHEET**

**(Grant Number: EE0006159, State: MD, Program Year: 2015)**

**IV.1 Subgrantees**

<b>Subgrantee (City)</b>	<b>Planned Funds/Units</b>
Allegany County Resources Development Commission (Cumberland)	\$199,748.00 22
Baltimore City Department of Housing & Community Development (Baltimore)	\$1,272,018.00 192
Community Action Council of Howard County (Columbia)	\$605,572.00 68
Community Assistance Network, Inc. (Baltimore)	\$1,293,886.00 131
Frederick Community Action Agency (Frederick)	\$204,407.00 23
Garrett County Community Action Committee, Inc. (Oakland)	\$38,368.00 6
Housing Authority of St. Mary's County, MD (Lexington Park)	\$577,841.00 65
SHORE UP! Inc. (Salisbury)	\$308,388.00 35
<b>Total:</b>	<b>\$4,500,228.00 542</b>

**IV.2 WAP Production Schedule**

<b>Weatherization Plans</b>	<b>Units</b>
Total Units (excluding reweatherized)	542
Rewatherized Units	0
Note: Planned units by quarter or category are no longer required, no information required for persons.	

<b>Average Unit Costs, Units subject to DOE Project Rules</b>		
<b>VEHICLE &amp; EQUIPMENT AVERAGE COST PER DWELLING UNIT (DOE RULES)</b>		
A	Total Vehicles & Equipment (\$5,000 or more) Budget	\$0.00
B	Total Units Weatherized	542
C	Total Units Reweatherized	00
D	Total Dwelling Units to be Weatherized and Reweatherized (B + C)	542
E	Average Vehicles & Equipment Acquisition Cost per Unit (A divided by D)	\$0.00
<b>AVERAGE COST PER DWELLING UNIT (DOE RULES)</b>		
F	Total Funds for Program Operations	\$3,081,648.00
G	Total Dwelling Units to be Weatherized and Reweatherized (from line D)	542
H	Average Program Operations Costs per Unit (F divided by G)	\$5,685.70
I	Average Vehicles & Equipment Acquisition Cost per Unit (from line E)	\$0.00
J	Total Average Cost per Dwelling (H plus I)	\$5,685.70

**IV.3 Energy Savings**

**Method used to calculate savings:** ☒ WAP algorithm ☐ Other (describe below)

**Method used to calculate savings description:**

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**WEATHERIZATION ANNUAL FILE WORKSHEET**

(Grant Number: EE0006159, State: MD, Program Year: 2015)

DHCD used the DOE recommended formula of 30.5 MBTUs per weatherized unit to calculate energy savings which will result in 15,433 MBTUs for the year.

This year estimated energy savings (MBtus):	16,531	
Prior year estimated energy savings (MBtus):	6,923	Actual: <span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px;"></span>

#### IV.4 DOE-Funded Leveraging Activities

DHCD expects to partner with other state agencies to leverage DOE funding and expand the program services to a greater number of eligible families. The following is a summary of the initiatives to facilitate the weatherization of additional low income homes:

The Department of Human Resources (DHR), Maryland Energy Assistance Program (MEAP), as administered by the Office of Home Energy Programs (OHEP) will make Low Income Home Energy Assistance Program (LIHEAP) funds available to operate furnace repair and replacement and for eligible weatherization activities in conjunction with DHCD's DOE WAP funding. The program began in 1997 with the original agreement providing \$40,000 to replace 20 furnaces. The program is currently funded at \$1,500,000 for the next fiscal year.

Columbia Gas of Maryland contracts with DHCD to provide funding to administer Columbia's Warm Wise Low Income Usage Reduction Program (WW LIURP). Program funds are used to repair and replace gas furnaces and eligible weatherization activities. The program is currently funded at \$90,000 annually and it is expected that this contract will be renewed.

#### IV.5 Policy Advisory Council Members

☒ Check if an existing state council or commission serves in this category and add name below

Baltimore City Department of Housing & Community Development	Type of organization: Unit of Local Government Contact Name: Mike Lafferty Phone: 4439841066 Email: <a href="mailto:michael.lafferty@baltimorecity.gov">michael.lafferty@baltimorecity.gov</a>
Community Action Council of Howard County	Type of organization: Non-profit (not a financial institution) Contact Name: Bitia Dayhoff Phone: 4103136318 Email: <a href="mailto:bdayhoff@cac-hc.org">bdayhoff@cac-hc.org</a>
Frederick Community Action Agency	Type of organization: Unit of Local Government Contact Name: Paul Mantello Phone: 3016003974 Email: <a href="mailto:pmantello@cityoffrederick.com">pmantello@cityoffrederick.com</a>
Maryland Energy Administration	Type of organization: Unit of State Government Contact Name: Jenn Gallicchio Phone: 4102607542 Email: <a href="mailto:jgallicchio@energy.state.md.us">jgallicchio@energy.state.md.us</a>
Office of Peoples Counsel	Type of organization: Unit of State Government Contact Name: Cindy Riely Phone: 4107678156 Email: <a href="mailto:cindyri@opc.state.md.us">cindyri@opc.state.md.us</a>

#### IV.6 State Plan Hearings (Note: attach notes and transcripts to the SF-424)

Date Held	Newspapers that publicized the hearings and the dates the notice ran
04/27/2015	The State Plan Hearing notice was published in the Maryland Register. The notice in the Maryland Register can be seen here: <a href="http://www.dsd.state.md.us/MDR/4208/Assembled.htm#_Toc416770650">http://www.dsd.state.md.us/MDR/4208/Assembled.htm#_Toc416770650</a> The State Plan was made available to the public on April 17, 2015. It was posted on our website at <a href="http://www.mdhousing.org/Website/Programs">http://www.mdhousing.org/Website/Programs</a> . The Hearing took place on 4/27/2015.

#### IV.7 Miscellaneous

**Recipient Business Officer** is the representative authorized to act on behalf of the Grantee to negotiate the award. All DOE official correspondence related to the award will be addressed to the Recipient Business Officer which is designated as John Mello, Deputy Director, Energy Programs; [John.Mello@maryland.gov](mailto:John.Mello@maryland.gov); 301-429-7790.

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**WEATHERIZATION ANNUAL FILE WORKSHEET**

**(Grant Number: EE0006159, State: MD, Program Year: 2015)**

**Recipient Principal Investigator** is the technical representative authorized to act on behalf of the Grantee as project manager for the award. The Recipient Principal Investigator is the prime point of contact for the DOE Project Officer during the project period of performance and will receive a copy of all DOE official correspondence related to the award, which is designated as John Mello, Deputy Director, Energy Programs; [John.Mello@maryland.gov](mailto:John.Mello@maryland.gov); 301-429-7790.

**2015 Training & Technical Assistance Plan**

The 2015 Maryland Weatherization Network is comprised of LWAs with varying degrees of historical experience performing weatherization and related home renovation and human services. DHCD has conducted a thorough investigation in order to reveal the training and technical assistance needs of both the agencies in the Network and the DHCD team responsible for implementation of DOE's WAP. For the Network, the investigation included an analysis of the results of Quality Assurance Inspections from the last twelve months and a review of applications submitted by LWAs in March of 2015. For DHCD WAP staff, DHCD looked at existing capacity in staff assigned to the program, the depth of experience each staff member has with DOE WAP, and the results of DOE's annual monitoring of DHCD. The following TTA Plan addresses the needs identified. DHCD's standard training requirements dictate that all subgrantees performing weatherization are required to complete certification and non-certification trainings related to the task they perform. These standard technical training requirements have also been included in this TTA Plan.

**DHCD Staff Training:**

DHCD's analysis of program staff capacity revealed immediate training needs in the following areas:

- Subgrantee Programmatic & Fiscal Monitoring – DHCD is in the process of procuring a nationally recognized trainer who has ample direct experience with programmatic and fiscal monitoring under DOE WAP. She will provide training to program staff members who are responsible for subgrantee monitoring.
- QCI – Retraining – Several DHCD QA Inspectors are in the process of retraining for the QCI. DHCD is working with Baltimore City Community College (BCCC) and their QCI Trainer to deliver remedial training areas of weakness identified by the inspectors' first attempt at QCI training and testing. Retraining will continue formally with classes lead by the BCCC Trainer. Additionally, informal mentor training is taking place between DHCD's QCI certified inspectors and those who require retraining.

The following designates standard position-based training for specific program personnel:

- DHCD Quality Assurance Inspectors must all be certified as HEP Quality Control Inspectors, effective July 1, 2015. Additionally, all must have at least BPI Building Analyst certification, OSHA 30, Lead Inspector and Asbestos Inspector credentialed status.
- DHCD Senior Program Manager is required to have a BPI Building Analyst certification and will be offered training in Advanced Weatherization Tactics.

On an ongoing basis, program staff attends National Association for State Community Services Program (NASCS) conferences for continuing updates in each of their areas of expertise, along with Maryland Community Action Partnership (MCAP), Affordable Comfort, Inc. (ACI), frequent webinar's and industry events. Staff also utilizes programmatic, financial and technical guidance websites such as Weatherization Assistance Program Technical Assistance Center (WAPTAC) and the National Weatherization Training Platform (NWTP).

**Weatherization Network Training and Capacity**

QCI: Maryland's Weatherization Network is in the process of becoming QCI certified. QC Inspectors from each LWA are attending training delivered by Baltimore City Community College. QCI training began in March of 2015 through an IREC Accredited Training Provider. Testing began in April 2015. DHCD will reimburse all Quality Control Inspector and Energy Audit personnel from the Subgrantees for the HEP Quality Control Inspector training and testing. DHCD will pay for classes and up to three attempts at testing for each inspector. DHCD fees are covered under our T&TA budget.

As of July 1, 2015, no QC Inspectors or Energy Auditors will be allowed to conduct QC onsite without this credential. Pursuant to WPN 14-4, with this effort, DHCD has set in motion the implementation plan to bring the HEP credentials and SWS objectives into the DOE program.

In the instance that an agency cannot get their staff QCI certified in time to comply with the July 1, 2015 implementation, DHCD will allow a temporary waiver according to the following conditions.

Effective Monday, June 1, 2015, LWAs and SWCs may apply to be temporarily exempted from the requirement that the QC Inspector be employed full time by the LWA/SWC. Application letters must be submitted by June 22, 2015.

Eligible applicant agencies will be agencies that do not, at the time of application, employ personnel certified by the Building Performance Institute as a Home Energy Professional Quality Control Inspector.

The following are required components of an application to be temporarily exempted from DHCD's policy that all QC Inspectors be employed by the LWA/SWC:

- The application letter must identify all QC Inspectors currently on staff and include attached resumes for each.
- The letter must demonstrate, through QC staff resumes, written BPI denial of prerequisites, or evidence of three failed HEP QCI exams, that the agency will not have a Home Energy Professional Quality Control Inspector on staff on July 1, 2015.
- The application letter must outline a plan to secure QCI certified staff by 2/1/2016. The plan should detail efforts to train existing staff or recruit new staffs, who are HEP QCI certified or approved to sit for the exam. Ideally, the plan would describe a mentoring relationship between the QCI certified subcontractor and the LWA / SWC.
- The application letter must identify an individual or entity that will provide QC Inspections as a subcontractor to the LWA/SWC during the period of exemption. Please attach a copy of the QCI certificate and of an agreement between the agency and the subcontractor that acknowledges the subcontractor's knowledge of and willingness to adhere to all relevant policies in the POM and SWS Fields Guide and copies of required certifications and licenses outlined in the POM.

DHCD will review all application letters and approve or deny each, in writing, by July 1, 2015. If granted, the exemption will be a ~~time~~ leniency to allow agencies to meet the POM requirement. Exempted agencies will be required to submit a status update at 90-days from the date of exemption that states progress made toward employing a HEP QCI certified Quality Control Inspector.



**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**WEATHERIZATION ANNUAL FILE WORKSHEET**

**(Grant Number: EE0006159, State: MD, Program Year: 2015)**

All agencies must have HEP QCI certified Quality Control Inspectors on staff or have a written exemption from DHCD on July 1, 2015 in order to continue working in Maryland's weatherization programs.

**Standardized Training by Job Task:** To achieve the goal of "standardizing" quality services and maintaining worker safety throughout the State, LWA field staff must attend a standardized set of training sessions that are approved, and in some cases, reimbursed by DHCD. The individual must attend both classroom and laboratory sessions and learn how to investigate and remedy the many aspects of a dwelling unit's construction and its use of energy. Some classes can be taken online, while others must be taken at a facility and can be scheduled directly by the subgrantee. DHCD will schedule classes for all sub grantees. Tier 1 training is reimbursed by DHCD. Before being reimbursed, each program participant must show successful completion of the course with the earned certificate. These certificates are kept on file at DHCD to ensure compliance with training deadlines.

**Task specific training requirements:**

- Installers shall have
  - Certification of completion of the DOE/BPI HEP Installer by June 30, 2017
  - certification of weatherization training received 2009 or later that meets the U. S. Department of Energy (DOE) core competencies,
  - certification of EPA Lead Repair Renovation and Painting (LRRP) training, and
  - an Occupational Safety and Health Administration issued 10-hour Construction Safety certification card.
- Crew Leaders shall have
  - Certification of completion of the DOE/BPI HEP Crew Leader by June 30, 2017
  - certification of weatherization training received 2009 or later that meets the U. S. Department of Energy (DOE) core competencies,
  - certification of EPA Lead Repair Renovation and Painting (LRRP) training, and
  - an Occupational Safety and Health Administration issued 10-hour Construction Safety certification card.
- Energy Auditors shall have
  - Certification of completion of the DOE/BPI HEP Energy Auditor by June 30, 2016
  - Building Analyst Professional or Envelope Professional Certification from the Building Performance Institute, Inc. (BPI).
  - certification of weatherization training received 2009 or later that meets the U. S. Department of Energy (DOE) core competencies,
  - certification of EPA Lead Repair Renovation and Painting (LRRP) training, and
  - an Occupational Safety and Health Administration issued 10-hour Construction Safety certification card.
- Quality Control Inspectors shall have
  - Certification of completion of the DOE/BPI HEP QCI
  - Building Analyst Professional or Envelope Professional Certification from the Building Performance Institute, Inc. (BPI).
  - certification of weatherization training received 2009 or later that meets the U. S. Department of Energy (DOE) core competencies,
  - certification of EPA Lead Repair Renovation and Painting (LRRP) training, and
  - an Occupational Safety and Health Administration issued 10-hour Construction Safety certification card.

**Tier 2 training:** Tier two training covers specific challenging issues identified by DHCD Quality Assurance Inspector (QAI) monitoring or by network partners themselves. These are available on an as-needed basis. For example, one week courses on combustion safety were provided by DHCD through a local community college in January 2015.

**Field TTA:** In addition to classroom training, DHCD spends a significant amount of time on Training and Technical Assistance in the field. Quality Assurance Inspectors meet regularly on-site with subgrantees to provide hands-on training and support for weatherization measures installation and standards, and comprehensive energy audit advice. References such as BPI protocols, the Maryland DHCD 2015 Field Guide, the Standard Weatherization Specifications, and the POM are all used in a working format.

**Hancock Energy Software / HEAT:** Successfully using the Hancock/HEAT system is a key component to being a successful subgrantee within the program. DHCD has an in-house Energy Technology Officer who is available to troubleshoot process issues, and provide on-site trainings year round to ensure accurate and efficient use of Hancock.

DOE F 540.5

U.S. Department of Energy

OMB Control No: 1910-5127

(08/05)

**WEATHERIZATION ASSISTANCE PROGRAM  
SUBGRANTEE INFORMATION**

Expiration Date: 11/30/2016

State: MD Grant Number: EE0006159 Program Year: 2015

Name:	<b>Allegany County Resources Development Commission</b>	Contact:	Susan Malone	
		DUNS:	084997493	
Address:	125 Virginia Ave. Cumberland, MD 21502-0000	Phone:	(301) 783-1713	
		Fax:	(301) 777-5890	
		Email:	smalone@allconet.org	
Counties served:	WASHINGTON County ALLEGANY County	Tentative allocation:	\$ 199,748.00	Congressional districts served: <u>CD</u>
		Planned units:	22	MD-06
		Type of organization:	Non-profit organization	MD-06
		Source of labor:	Agency and Contractors	
Name:	<b>Baltimore City Department of Housing &amp; Community Development</b>	Contact:	Mike Lafferty	
		DUNS:	140231759	
Address:	417 East Fayette St., 3rd Floor Baltimore, MD 21202-0000	Phone:	(443) 984-1066	
		Fax:	(410) -	
		Email:	michael.lafferty@baltimorecity.gov	
Counties served:	BALTIMORE City	Tentative allocation:	\$ 1,272,018.00	Congressional districts served: <u>CD</u>
		Planned units:	192	MD-02
		Type of organization:	Unit of local government	MD-02
				MD-03
				MD-07
				MD-07
				MD-03
		Source of labor:	Agency	
Name:	<b>Community Action Council of Howard County</b>	Contact:	Bitia Dayhoff	
		DUNS:	965824212	
Address:	6751 Columbia Gateway Drive, 2nd Floor Columbia, MD 21046-1934	Phone:	(410) 313-6318	
		Fax:	(410) 313-6479	
		Email:	bdayhoff@cac-hc.org	
Counties served:	HOWARD County MONTGOMERY County	Tentative allocation:	\$ 605,572.00	Congressional districts served: <u>CD</u>
		Planned units:	68	MD-07
		Type of organization:	Non-profit organization	MD-03
				MD-07
				MD-03
		Source of labor:	Agency and Contractors	
Name:	<b>Community Assistance Network, Inc.</b>	Contact:	Antonio Coffield	
		DUNS:	602843898	
Address:	7900 East Baltimore Street Baltimore, MD 21224-0000	Phone:	(410) 285-4674	
		Fax:	(410) 285-6707	
		Email:	acoffield@canconnects.org	

DOE F 540.5

U.S. Department of Energy

OMB Control No: 1910-5127

(08/05)

**WEATHERIZATION ASSISTANCE PROGRAM  
SUBGRANTEE INFORMATION**

Expiration Date: 11/30/2016

State: MD Grant Number: EE0006159 Program Year: 2015

Counties served:	CARROLL County PRINCE GEORGE'S Count CECIL County BALTIMORE County ANNE ARUNDEL County HARFORD County	Tentative allocation: \$ 1,293,886.00 Planned units: 131 Type of organization: Non-profit organization	Congressional districts served:	CD MD-03 MD-01 MD-01 MD-02 MD-07 MD-07 MD-06 MD-02 MD-03 MD-06
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Source of labor: Agency and Contractors

Name:	Frederick Community Action Agency	Contact:	Mike Spurrier
		DUNS:	619357650
Address:	100 South Market Street Frederick, MD 21701-0000	Phone:	(301) 600-1506
		Fax:	(301) 662-9079
		Email:	mspurrier@cityoffrederick.com
Counties served:	FREDERICK County WASHINGTON County	Tentative allocation: \$ 204,407.00 Planned units: 23 Type of organization: Unit of local government Source of labor: Agency and Contractors	Congressional districts served: CD MD-06 MD-06

Name:	Garrett County Community Action Committee, Inc.	Contact:	Lisa Swift
		DUNS:	069404523
Address:	104 East Center Street Oakland, MD 21550-1328	Phone:	(301) 334-9431
		Fax:	() -
		Email:	lswift@garrettcac.org
Counties served:	GARRETT County	Tentative allocation: \$ 38,368.00 Planned units: 6 Type of organization: Non-profit organization Source of labor: Agency	Congressional districts served: CD MD-06 MD-06

Name:	Housing Authority of St. Mary's County, MD	Contact:	Dennis Nicholson
		DUNS:	22516140
Address:	21155 Lexwood Drive Suite C Lexington Park, MD 20653-0000	Phone:	(301) 866-6590
		Fax:	(301) 737-5628
		Email:	margiec@md.metrocast.net
Counties served:	CALVERT County CHARLES County ANNE ARUNDEL County ST. MARY'S County PRINCE GEORGE'S Count	Tentative allocation: \$ 577,841.00 Planned units: 65 Type of organization: Unit of local government Source of labor: Contractors	Congressional districts served: CD MD-01

**WEATHERIZATION ASSISTANCE PROGRAM  
SUBGRANTEE INFORMATION**

Expiration Date: 11/30/2016

State: MD Grant Number: EE0006159 Program Year: 2015

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Name:	<b>SHORE UP! Inc.</b>	Contact:	Freddy Mitchell
		DUNS:	82603028
Address:	520 Snow Hill Road	Phone:	(410) 749-1142325
	Salisbury, MD 21804-0000	Fax:	() -
		Email:	fmitchell@shoreup.org
Counties served:	DORCHESTER County	Tentative allocation:	\$ 308,388.00
	WORCESTER County	Planned units:	35
	WICOMICO County	Type of organization:	Non-profit organization
	SOMERSET County	Source of labor:	Agency and Contractors
		Congressional districts served:	<u>CD</u> MD-02

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**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0006159, State: MD, Program Year: 2015)**

This worksheet should be completed as specified in Section III of the Weatherization Assistance Program Application Package.

**V.1 Eligibility**

**V.1.1 Approach to Determining Client Eligibility**

Provide a description of the definition of income used to determine eligibility

In accordance with 10 CFR 440.3, eligibility for assistance is defined under the Low Income Home Energy Assistance Act of 1981. DHCD will provide assistance based on at or below 200 percent of the poverty level determined in accordance with the Director of the Office of Management and Budget.

Describe what household Eligibility basis will be used in the Program

DHCD has partnered with the Maryland Department of Human Resources (DHR), Office of Home Energy Programs (OHEP) which administers the Low-Income Home Energy Assistance Program (LIHEAP). DHCD is a subgrantee recipient of LIHEAP funds received from DHR OHEP for the Maryland Energy Assistance Program (MEAP). Through this partnership, DHCD has access to the DHR OHEP database to download a list of households on a monthly basis that have been certified as financially eligible for MEAP services. Once the list is retrieved, DHCD organizes the results and assigns cases to the subgrantees.

Both DHCD and Maryland's Local Weatherization Agency (LWA) subgrantees will conduct intake and certification procedures for households that exceed the MEAP income limits of 175 percent of poverty but are below 200 percent of the OMB poverty limits. This will be done at the time of intake for customers applying for services.

DHCD also provides outreach to customers that do not receive assistance through the LIHEAP program through informational brochures provided at community centers, community action agencies and local government offices. DHCD attends community energy fairs to provide information on the WAP program. In 2013 and 2014, DHCD has worked with the Maryland Fuel Fund and the Office of Home Energy Programs (housed within Maryland's Department of Human Resources) to create a strategy to ensure that customers that are over income for LIHEAP (which maintains income eligibility at 175% of federal poverty level) receive full eligibility screening and are informed if they are eligible for WAP (which uses 200% of federal poverty level for eligibility). DHCD is working with OHEP to increase the number of LIHEAP applicants in the 175%-200% range of federal poverty level that are referred to DHCD for assistance through WAP. In addition, DHCD and its local weatherization agencies perform intake and income verification in their office, and are working with the Maryland Fuel Fund to provide referrals to DHCD's WAP program from Fuel Fund agencies for applicants earning between 175% and 200% of federal poverty level that are not currently being referred to DHCD for assistance through WAP.

All applications certified eligible expire 12 months from the date of certification.

Describe the process for ensuring qualified aliens are eligible for weatherization benefits

DHCD uses the OHEP application certification process to determine eligibility for MEAP and DOE WAP services and Citizenship status is requested on the application.

Intake officers have also reviewed and refer to guidance provided by Health and Human Services (HHS) under LIHEAP at <http://aspe.hhs.gov/hsp/immigration/restrictions>.

All MEAP eligible households may choose to be referred to DOE WAP.

**V.1.2 Approach to Determining Building Eligibility**

Procedures to determine that units weatherized have eligibility documentation

The process is consistent with DOE Regulations, which allows States to use LIHEAP eligibility criterion as the basis of eligibility under WAP, provided that the

U.S. Department of Energy  
WEATHERIZATION ASSISTANCE PROGRAM (WAP)  
STATE PLAN/MASTER FILE WORKSHEET

(Grant Number: EE0006159, State: MD, Program Year: 2015)

LIHEAP basis is at least 200 percent of the poverty level and that the same basis is used throughout the State. Household eligibility is determined by the Department of Human Resources (DHR), Office of Home Energy Programs (OHEP), which administers LIHEAP. DHCD's partnership with DHR, OHEP provides direct access to the OHEP database for a monthly list of low income households that have been certified as eligible by the OHEP intake staff. DHCD retrieves the list and assigns cases to the subgrantees. An executed copy of the certified eligible application of each client is required and is maintained in the electronic client file and by hard copy.

DHCD and Maryland's Local Weatherization Agency (LWA) subgrantees will conduct intake and certification procedures for households that exceed the MEAP income limits of 175 percent of poverty to 200 percent of the OMB poverty limits. Subgrantees are required to document the household income as part of a client's file.

Verification of the household's income information from all sources is recorded on the application and remains in the client's file. Subgrantees must document and verify clients who are homeowners and obtain landlord permission for clients who are tenants prior to beginning work.

Describe Reweatherization compliance

DHCD allows, but discourages, subgrantees to provide additional eligible cost-effective efficiency measures to homes that have received DOE WAP services prior to September 30, 1994. Previously weatherized, ARRA funded houses post-2009 are maintained in DHCD's Hancock program management software. Pre-2009 houses are maintained by Access database. All aspects of the completed unit are easily identified by subgrantee, funding source, cost and measures completed. If the unit is in the database, the software will acknowledge a duplicate address and deny further access to proceed without DHCD authorization. If a residence is not in the Hancock or Access database, each agency has the ability to visually identify previously weatherized unit upon audit. At that point, if previous weatherization work has been completed, the file is denied and processed according to those guidelines per the POM 2014.

Describe what structures are eligible for weatherization

Eligible structures for weatherization include those that can be captured by the single family audit and include: single family homes, small multi-unit (1-4 units without common spaces or any shared utilities), manufactured housing, group homes, single room occupancy rooming houses (SRO), and shelters.

DHCD will review on a case by case basis other individually heated and cooled multi-unit developments (up to 25 units) to determine if their structure is eligible for the approved single family audit procedure. Projects that exceed 25 units will be reviewed on a case by case basis and presented to the Program Officer for approval. We utilize 50%/66% rule per WPN 11-04, for income eligible clients in these units to ensure all income eligible applicants are served. Upwards of 35% of the units weatherized by our Local Weatherization Agency Network are multi-unit developments with individual heating/cooling systems..

DHCD is able to assist many multi-family landlords and/or developers that contact WAP through our Multi-family affordable housing finance unit, which assists them with energy efficiency improvements and rehabilitation by utilizing Low Income Housing Tax Credits, loans and other funding sources to make the improvements. DHCD was awarded \$12.5 Million over 3 years to provide installation of energy improvements in affordable multifamily rental housing developments. The program is funded by the ratepayers of participating Maryland utilities and regulated by the Public Service Commission.

**National Historic Preservation Act** - The procedures below outline the process for those activities which may have a possible effect on historic properties and ensures that DHCD's weatherization programs are in compliance with the Programmatic Agreement (PA) with the Maryland State Historic Preservation Office (MD SHPO) regarding the National Historic Preservation Act.

Review Process:

1. When a window or door measure has been added, the Hancock system will move to the State Approval Screen where the program will stop the job from being processed further. A DHCD inspector reviews the measure and if the proposed work is limited to measures listed in the PA Exhibit I, no additional review is necessary. Hancock is unlocked and the work can proceed. Most weatherization measures do not require further review.

2. If the proposed work is not limited to activities listed in Exhibit I, the LWA/SWC or Energy Auditor must provide the following project information to the DHCD historical architect for review.

- Digital photographs showing general views of all sides of the exterior of the building.
- Digital photographs showing the features that will be affected by the proposed work (e.g. the window to be repaired for example).
- List the work to be undertaken, please be specific (for example; replace broken glazing in first floor living room window, 2'6"x3'4" double hung wood window, wood frame to remain).

**NO WORK MAY BEGIN UNTIL THE PROJECT HAS BEEN REVIEWED AND APPROVED IN WRITING BY THE DHCD HISTORICAL**

U.S. Department of Energy  
WEATHERIZATION ASSISTANCE PROGRAM (WAP)  
STATE PLAN/MASTER FILE WORKSHEET

(Grant Number: EE0006159, State: MD, Program Year: 2015)

ARCHITECT.

Once approved or denied, the DHCD Historical Architect will notify the LWA/SWC and DHCD WAP by email the results of the review and the project is released from Hancock.

Describe how Rental Units/Multifamily Buildings will be addressed

DHCD's policy regarding rental units/multi-unit buildings is outlined in DHCD's Program Operations Manual 2014(POM), and follows WPN 13-3, specifically Eligible Rental Weatherization guidance. Subgrantees must obtain landlord permission for clients who are tenants prior to beginning work. Enhancements to the unit and benefits to the tenant provided by weatherization work are protected against rent increases due to the weatherization work that was completed for a minimum of one year, and ensures that no undue property enhancements occur as a result of the weatherization process. DHCD does not require landlord contributions for weatherization improvements.

DHCD has also developed procedures for eligible occupants of group homes, shelters, and single room occupancy situations. DHCD allows the weatherization of shelters and group homes in accordance with 440.22 (f). Prior approval from DHCD is required in all cases.

Describe the deferral Process

Per WPN 11-6 and DHCD's Health and Safety Plan and Program Operations Manual, units may be deferred on a case by case basis. Reasons for deferral are identified at the time of the Energy Audit. The subgrantee will consult with a DHCD Quality Assurance Inspector before deferral, completely list the cause for deferral on the DHCD Deferral form, upload it to Hancock and notify the client per the guidelines in the POM. Agencies should make every attempt to refer the households to available services and do their best to ensure that problems are resolved so that the weatherization work can eventually be performed. The subgrantee will select the deferred option in the Hancock Energy Software database so that the information is maintained electronically in the client file.

Deferral Examples may include, but are not limited to:

1. The client has known health conditions that prohibit the installation of insulation and/or other weatherization materials.
2. The building structure or its mechanical systems, including electrical and plumbing, are in such a state of disrepair that they cannot be repaired reasonably.
3. The house has sewage or other sanitary problems that would further endanger the client and weatherization installers if weatherization work is performed and repair is beyond the scope of reasonable cost justification.
4. The house has been condemned or electrical, heating, plumbing, or other equipment has been "red tagged" by local or state building officials or utilities.
5. Moisture problems are so severe that they cannot be resolved.
6. Dangerous conditions exist due to high carbon monoxide levels due to combustion appliances and cannot be reasonably resolved.
7. The client is uncooperative, abusive, or threatening to the crew, subcontractors, auditors, inspectors, or others who must work on or visit the house.
8. The extent and condition of lead-based paint in the house would potentially create further health and safety hazards were to be disturbed.
9. Illegal activities are being conducted in the dwelling unit.

**V.1.3 Definition of Children**

Definition of children (below age): 5

**V.1.4 Approach to Tribal Organizations**

☐ Recommend tribal organization(s) be treated as local applicant?

If YES, Recommendation. If NO, Statement that assistance to low-income tribe members and other low-income persons is equal.

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0006159, State: MD, Program Year: 2015)**

Assistance to low income tribe members will be the same as for all low income persons in Maryland.

**V.2 Selection of Areas to Be Served**

DHCD acknowledges that preference is given to local governments as subgrantees. Community Action Agency (CAA) or other public or non-profit 501c3 entity which has or is currently administering an effective weatherization program may be subgrantees as well. DHCD competitively selects local governments or 501c3 non-profits for WAP services with preference given to local government applicants. From those agencies or 501c3 non-profits selected by the competitive process, DHCD will select certain supplementary agencies or 501c3 non-profits to provide support in a jurisdiction in the event that performance is substandard.

If it has been determined that a Subgrantee cannot fulfill their contractual obligations, steps may be implemented to redistribute any remaining allocated funds to other Subgrantees. These funds will be redistributed to the nearest Subgrantee, if feasible, to provide services in the same general geographical area.

When sufficient applicants are available, DHCD designates a primary agency and a secondary agency in each county. Agencies are selected by a proven ability to exceed expected production levels and quality of work while complying with applicable local, state, and federal policies.

DHCD will identify capable subgrantees to provide or be positioned to provide supplementary support in anticipation of potential changes in subgrantee infrastructure and/or performance. Reallocating funds or supplying referrals to these 'back-up' subgrantees will allow DHCD to quickly mitigate any potential impacts or interruptions in service to the low income families in areas where subgrantees experience problems delivering the desired level of production or quality of weatherization services. In many cases, these 'back-up' agencies will only be allocated funding for weatherization work if the primary subgrantee in that jurisdiction is unable to perform to the level required by the program.

The selection of local agencies was based on information provided in their application.

General competitive selection requirements include:

1. Any public or private 501c3 non-profit community based organization having tax-exempt status, a governing Board of Directors, in good standing with their 501c3 designation, and in good standing with the State of Maryland could apply for funding available through the competitive selection. The applicant is not limited to the number of jurisdictions it wishes to compete for funding.

2. Applicants that respond to the competitive selection are required to meet the following minimum qualifications of providers:

- Pursuant to federal regulations, 10 CFR 440.15 available electronically at <http://www.waptac.com/Rules-and-Regulations/Federal-Regulations.aspx>, agencies must be a private or public non-profit entity as recognized by federal and State laws. Preference is given to community action agencies or other entities which have or are currently administering an effective weatherization assistance program. Non-profit organizations must have an active board of directors and be organized in accordance with applicable laws of the State of Maryland.
- At least three (3) years of experience providing weatherization services.
- The financial capacity to provide weatherization services for not less than fifteen (15) housing units each month. This is verified by looking at evidence be in the form of recently audited (or best available) financial statements, including a certification by the Chief Financial Officer (or equivalent officer) that the statements are accurate and reliable and indicative of adequate working capital; Lines of credit; Successful financial track record; Adequate working capital; or Financial Rating, such as provided by Dun and Bradstreet.
- Possess one (1) blower door kit complete with the DM 32W Dual Channel Touchscreen Manometer and one (1) Combustion Analysis Kit per Energy Auditor / Quality Control Inspector.
- All weatherization workers, energy auditors and Quality Control (QC) inspectors shall have EPA Lead Repair Renovation and Painting (LRRP) certification.
- All weatherization workers, energy auditors and Quality Control (QC) inspectors shall have certification of weatherization training received 2009 or later that meets the U. S. Department of Energy (DOE) core competencies, per DHCD requirements.
- All weatherization workers, energy auditors and Quality Control (QC) inspectors shall have Occupational Safety and Health Administration 10-hour Construction Safety certification.
- All energy auditors and Quality Control (QC) inspectors shall have the Building Analyst Professional or Envelope Professional Certification from the



**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

(Grant Number: EE0006159, State: MD, Program Year: 2015)

Building Performance Institute, Inc. (BPI).

- All Quality Control (QC) inspectors shall obtain the HEP Quality Assurance Inspector credential by June 30, 2015.
  - The applicant must be a private or public 501c3 non-profit entity, have an active Board of Directors and furnish a minimum of quarterly minutes of Board Meetings, and meet prescribed program and fiscal requirements;
  - Demonstrate that it has a system of fiscal control and fund accounting procedures to assure the proper disbursement of accounting for federal funds;
  - Demonstrate its ability to recruit, hire, train and supervise staff necessary to perform intake, certification, outreach, energy audits, material installation, and fiscal functions to support the DOE WAP;
  - Demonstrate its ability to conduct outreach activities designed to assure that eligible households with elderly and/or disabled individuals are made aware of the program;
  - Describe their process to complete weatherization activities on all homes within the quality and compliance standards set forth by DHCD;
  - Demonstrate prior experience in delivering service to low-income households;
  - Demonstrate its ability in dealing with the low-income community and capability in delivering responsive service; and
  - Demonstrate that a facility exists which could accommodate application intake and certification for the number of applications to be completed.
3. If an applicant is a current WAP local agency, the following information, at minimum, is evaluated in addition to the other criteria stipulated in the competition selection:
- The ability of the applicant to complete homes in a timely manner in relation to customer eligibility, service delivery, quality control and reporting to the State; and
  - Compliance history with DOE WAP internal control procedures and reporting requirements.
4. Applications are reviewed using, at minimum, the following criteria:
- Knowledge of the DOE WAP and scope of work to be performed;
  - Completeness and soundness of plan; management methodology; oversight of local production and inventory; method(s) of outreach and interface with other relevant human service providers and report preparation; and
  - Related experience in administration of weatherization assistance or similar programs; ability to meet production goals; and ability to produce quality work on homes weatherized.

### V.3 Priorities for Service Delivery

Within the HES system, prioritization is used to identify and provide WAP services to eligible households. Local agencies will target weatherization assistance to the elderly, households with disabled persons, units where there are children five years of age and under, and units with a high energy burden in which the household exceeds the median level of energy burden for all low-income households in the State. Each priority is scored equally. Clients with the highest scores are serviced first.

### V.4 Climatic Conditions

WPN 11-6 – states that “Red-tagged”, inoperable, or nonexistent heating system replacement, repair, or installation is allowed where climate conditions

U.S. Department of Energy  
WEATHERIZATION ASSISTANCE PROGRAM (WAP)  
STATE PLAN/MASTER FILE WORKSHEET

(Grant Number: EE0006159, State: MD, Program Year: 2015)

warrant...". Below is justification for the replacement and repair of heating systems based on climate conditions in the state of Maryland.

The state of Maryland has two distinct climates. Average temperatures in western Maryland are 65 °F in July and 28 °F in January. Average temperatures in eastern Maryland are 75 °F in July and 35 °F in January. According to the National Oceanic and Atmospheric Administration, for this year's heating season, heating demand that is 12% higher than last year and 5% higher than is historically "normal". Based on a historical normal for Maryland of 2,853 heating degree days, 2013 saw a decrease to 2,784 and 2014 saw an increase to 2934.

According to the Maryland Department of Health and Mental Hygiene, cold weather was responsible for a total of 15 deaths during the 2013/2014 monitoring period, and 30 deaths in the 2012/2013 monitoring period. . The majority of cold-related deaths were in Baltimore City and Prince Georges County, two counties that have a proportionally higher rate of eligible low-income families.

Maryland DHCD will allow heating system replacements as a health and safety measure in emergency no-heat situations (an emergency no-heat situation is when a heating system is inoperable between November 1 and March 31st) and when a certified professional can document imminent failure of the system (an imminent no-heat scenario). Outside of no-heat emergencies, DHCD will direct resources to ensuring safe and efficient operation of existing heating systems based on combustion safety analysis conducted by a certified building analyst professional or replace units if cost-effective.

## V.5 Type of Weatherization Work to Be Done

### V.5.1 Technical Guides and Materials

#### Weatherization Measure Installation and Standards

Decisions as to which services will be installed are determined by the audit results according to WPN 13-5 DOE audit procedures, and in strict accordance with DOE guidelines, and 10 CFR 440 Appendix A. All measures should be installed according to the Building Performance Institute (BPI) Standards (2013), the DHCD Saturn Energy Auditor Field Guide (2009), and the DHCD Weatherization Program Operations Manual 2014 (POM).

**Technical Training** - In order to maintain standardized quality in the field, DHCD requires every weatherization worker to be trained in these "Tier 1" classes, to be reimbursed and scheduled by DHCD. *Advanced Weatherization Tactics*, which is taught in the classroom and the lab, provides weatherization workers with hands on experience in weatherization work, including the use of a blower door, and classroom training in Health and Safety, Building Science, and customer service. Additionally, *OSHA 10* and *Lead Repair, Renovation and Paint (RRP)* classroom training and certification, which together cover the Job Task Analysis (JTAs) for Retrofit Installer, are currently required in order to be on a DOE project site. By September 2014, all weatherization workers must be trained and certified in *Asbestos Awareness* and *Mold Identification* for worker safety and Health and Safety issue identification and procedures. Energy Auditors (EAs) and Quality Control Inspectors (QCIs) must have the aforementioned training plus BPI Analyst or Envelope Professional training and certification. During PY2015, all QCIs must have the Home Energy Performance (HEP) Inspector certification from an IREC accredited center, or they will not be allowed to act as QCIs on DOE sites.

"Tier 2" training to cover specific issues identified by DHCD monitoring or the network themselves as challenging, is available on an as-needed basis, for example, a webinar on the implementation of the new Ashrae 2013 Standards.

**Standard Work Specifications (SWS)** - The Standard Work Specifications (SWS), developed by the National Renewable Energy Laboratory (NREL) and adopted by DOE, define the minimum requirements to ensure that the work performed during energy upgrades in single family, multi-family, and manufactured homes is effective, durable, and safe. This set of Standards will be used in conjunction with field guides. At the 2014 DHCD Network Meeting, Sub grantees were given copies of the comprehensive SWS standards list in anticipation to the changeover to the new Saturn Field Guide/SWS (2015) combination manual due to be distributed by April 1, 2015, per WPN 14-4. This new Saturn Field Guide will be specific to Maryland relevant measures, provide clear measure installation guidance, and tie in the applicable Standard for each measure. Specific technical references to Audit and Health and Safety protocols can also be found in the POM 2014. Draft Saturn Field Guides and standards will be completed by December 1, 2014 and finalized by April 1, 2015. The Saturn Field Guides and standards will be provided by DHCD to all weatherization workers at the Semi-Annual Network partners meeting. All recipients shall sign a form acknowledging that they have received them, and understand they are responsible to adhere to the standards outlined within. Mailings will also be sent to those not in attendance which will require a mailed or emailed confirmation of receipt.

Currently, the language in the Weatherization Agreements state, "WHEREAS the Program is also governed by the State Regulations set forth in COMAR 05.04.14 (the "State Regulations") and the Program Operations Manual (the "Manual") and any present or future guidance from DHCD. The Act, Federal Regulations, State Regulations and Manual are hereinafter referred to collectively as the Program Guidelines." We are adding the "Field Guide" specifically as

U.S. Department of Energy  
WEATHERIZATION ASSISTANCE PROGRAM (WAP)  
STATE PLAN/MASTER FILE WORKSHEET

(Grant Number: EE0006159, State: MD, Program Year: 2015)

an addendum to contracts when the new guide is distributed, instead of leaving it as part of the "Program Guidelines" group named previously.

**Audit** - Local Weatherization Agency (LWA) staff will perform a comprehensive energy audit of each home to identify the problems in the building that promote air movement, heat loss and heating system inefficiency. The auditor will use the blower door, furnace efficiency testing equipment and other devices to determine the levels of efficiency and any health and safety issues with existing combustion appliances. The auditor will also assess health and safety issues requiring abatement prior to service delivery. Local agency staff will use the Hancock Energy Audit Tool (HEAT) to model the house and determine the most cost-effective measures. The HEAT tool will model the house and based on a number of custom factors specific to each home, will determine the best method, for treating the problems identified in the energy audit, including the selection of materials best suited for correcting the deficiencies. Detailed technical guidance for audit procedures can be found in the POM 2014.

#### V.5.2 Energy Audit Procedures

Audit Procedures and Dates Most Recently Approved by DOE

**Single-Family** : HEAT energy modeling tool, approved 3/15/2014.

**Manufactured Housing** : The MHEA audit was approved by DOE on September 20, 2011 and all LWAs are required to use it for mobile homes.

**Multi-Family** : DHCD is not approved for to perform multifamily energy audits.

#### Comments

**Single Family Audits** - Per WPN 13-5, DHCD uses HEAT, a commercially available web-based audit tool that meets WAP requirements and for which approval was granted on 3/15/2014. Multi-unit developments and single family dwelling units are included with this tool.

**Mobile Home Auditing** - DHCD utilizes the latest version of the DOE's Weatherization Assistant to update the MHEA and ensure that mobile homes receive the most cost-effective measures.

Except for the cost of materials needed to eliminate health and safety hazards existing before, or because of, the installation of weatherization materials, and Incidental Repairs Measures (IRM) that must be installed in order to complete a weatherization measure, all weatherization measures must be "cost-effective" as defined by DOE. "cost-effective" means that each measure, except IRMs, and package of measures, including IRMs, installed in a dwelling unit must have a savings-to-investment ratio (SIR) which meets or exceeds 1.1. Appliances only (refrigerators and hot water heaters) require an SIR of 1.0.

HEAT uses interactive procedures to determine the optimum set of cost-effective measures and prioritize those energy saving measures in order of cost-effectiveness.

DHCD considers fuel-switching on a case by case, site specific basis, and installs cost-effective electric baseload measures per WPN 13-5, to help lower the energy costs at low-income households.

**Multi-family Auditing** - As DHCD is not approved for multifamily audits, DHCD will submit projects meeting the DOE definition of multifamily to the DOE Project Officer for approval. MF audits may be performed using any of the DOE approved MF auditing software programs.

#### V.5.3 Final Inspection

100% of WAP units receive a quality control inspection ensuring that all work meets the specifications per WPN 13-5 auditing protocol, WPN 15-4 Quality Work Plan requirements, DOE guidelines, CFR.440, the POM, and the 2015 DHCD Maryland Field Guide. The 2015 Maryland Field Guide includes applicable SWS by which the QCI is required to assess each project.

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0006159, State: MD, Program Year: 2015)**

In the 2015 Program Year, Quality Assurance Inspectors and Quality Control Inspectors must possess the Home Energy Professional Quality Control Inspector certification verifying the individual has the required DOE credentials to conduct an inspection. In addition, by April 1, 2015,

The purpose of the Quality Control Inspection is:

- To provide services in a manner that meets the highest level of professionalism and to comply with standards established by DHCD, DOE, and the industry; and
- To provide services in a timely fashion and with the highest level of resource accountability possible in accordance with the scope of work provided.

The following are mandatory for QC Inspectors:

- QCI must be certified as a Home Energy Professional Quality Control Inspector.
- Proof of the Home Energy Professional certification at the QCI level is required by every LWA QCI in PY2015. The Subgrantee LWA is responsible for ensuring that all Quality Control Inspectors are adequately trained and credentialed. Copies of certifications must be sent to DHCD before QCI activities are authorized. Each person performing a Quality Control inspection on a WAP job, must be certified as a Home Energy Professional Quality Control Inspector.
- Quality Control Inspectors must be independent of the work they are inspecting. The Quality Control Inspector cannot be the same individual who audited the property or performed any of the work for the property they are inspecting. DHCD may issue a temporary exemption to this policy in writing on a case by case basis while a subgrantee is building their capacity to fully comply with this policy. DHCD will perform QA inspections on no less than 5% of jobs that have an independent QC. DHCD will perform QA inspections on no less than 10% of jobs where the state has issued a temporary exemption based on LWA capacity to perform independent QC.
- QCIs must be full-time employees of the agency for which they perform inspections so that there is singular accountability. DHCD may issue a temporary exemption to this policy in writing on a case by case basis while a subgrantee is building their capacity to fully comply with this policy.

Each agency is required to have two full-time BPI certified staff members to audit and perform quality control on 100% of their WAP units. DHCD will work with smaller agencies that lack the resources to employ two full-time Inspectors to find an acceptable compromise.

It is the responsibility of the Quality Control Inspector to ascertain the completeness and quality of work of each dwelling unit before certifying in the Hancock system that the unit is complete and submitting an invoice.

Every client file must contain a signed Quality Control Inspection Form that certifies that the unit has had a final QC inspection and meets the required standards.

Quality Control Inspections must contain these elements at a minimum:

- Perform a blower door test to verify results of air infiltration reduction achieved;
- Perform a combustion efficiency test of the central heating system (fossil fuels) and all combustion based appliances.
- Perform a walk-through inspection of the property to verify the comprehensiveness of audit, installation of materials as recorded on the Work Order per the Maryland DHCD 2015 Field Guide, POM and DOE regulations. Verification that all measures meet SWS objectives is mandatory as of April 1, 2015.
- Document customer comments and obtain customer signature on the appropriate forms which verify the work performed; and E. Certify completeness and quality of all items listed in the work scope in HEAT.

#### **Quality Assurance Inspections**

WAP Quality Assurance (QA) Inspectors are required to review not less than 5% of all units provided to the DHCD by local agencies, and provide T&TA on a continuing basis equally. If production for the agency is slipping, or the QA Inspector finds a pattern of missing or inferior work in their random sampling, a higher percentage or all dwelling units of that agency may be inspected, with increased T&TA until the jobs are considered resolved (and meet all SWS objectives by April 1, 2015) and the the agency is back on track to meet production goals. Continued poor quality work may result in suspension of reimbursement for jobs, suspension, and ultimately termination of contract if issues cannot be resolved.

All DHCD QA Inspectors will be certified HEP Quality Control Inspectors as of July 1, 2015.

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

(Grant Number: EE0006159, State: MD, Program Year: 2015)

DHCD QA staff will primarily inspect only those units that have been certified as complete in the Hancock system by the Quality Control (QC) Inspector. Additionally, DHCD QA staff will inspect a percentage of work in progress jobs at the energy audit and installation stages. Total QA percentages including jobs in process will be between 5% and 10% unless unsatisfactory performance warrants a higher percentage.

When a LWA is issued a temporary exemption on having an independent QCI (independent from who audited or installed measures), DHCD QA will increase the rate of inspection from 5% to a 10% minimum rate of inspection.

If a unit is rated "Poor" the contact person at the agency will be notified via email by the QA Inspector and an automated email from HEAT advising of the QA Inspector results. The agency must access HEAT and create a work order of all outstanding items (see POM 2014, Appendix D, Hancock Manual for specific process). The software will email the LWA informing that a call back work order has been created. Once the outstanding items are completed and certified by the QC Inspector, the call back work order is completed and the software will email the QA Inspector that the unit is ready for re-inspection.

DHCD understands that "Poor" rated units will occur periodically. However, after a comprehensive inspection that has been certified by the LWAs QC Inspector, measures rated "Poor" by WAP QA Inspectors should be relatively minor and infrequent. When QA Inspectors see a pattern of "Poor" rated units, inspection rates will increase from 10% to up to 100% until DHCD QA staff can verify that the trend has been interrupted by T&TA and subsequently improved performance.

Ongoing T&TA by DHCD QA Inspectors from audit to close-out stage is available if an agency wants to verify that their audit standards are acceptable, if challenges arise in the field, or if workmanship seems to be slipping. The DHCD HEAT technology officer is available for in-house or remote training to resolve any program management software issues.

Visits to correct units that were rated, "Poor" must be scheduled within five days. Failure to adhere to this policy could result in the withholding of referrals, stopping payment on current invoices and, in extreme cases, suspension or removal from the WAP. If multiple "Poor" rated units are identified, DHCD will insist that all outstanding "Poor" units be resolved and request a corrective work plan from the agency to ensure future satisfactory work. Units rated "Poor" based on Health and Safety issues must be resolved within 24 - 72 hours depending on the seriousness of the issue as determined by DHCD Quality Assurance Inspector.

To briefly clarify standard QA inspection protocols, please note the following:

- A unit will be rated poor if materials reported as installed cannot be found
- A unit will be rated poor if measures were not installed to industry standards or to HEAT audit
- No unit will be rated poor for missed opportunities regarding air infiltration reduction unless the inspector uses a blower door and can verify that substantial air leakage still exists;
- A unit may be rated poor if major WAP services or leveraging opportunities were missed (e.g., no attic insulation installed and could have been, no furnace work performed etc.) and the file does not indicate why the service was omitted.
- A unit will be rated poor if health and safety measures are still required to protect the family.

#### Enforcing HEP QCI Standards

As the Maryland weatherization program integrates the HEP QCI into the standard training regimen required by DOE, it is imperative that DHCD's Quality Assurance team enforce the standards and practices identified in the QCI training. All current DHCD inspectors will be HEP QCI certified inspectors and newly hired DHCD inspectors must receive training and certification in order to perform independent Quality Assurance inspections. In the course of routine QA inspections they will review work against the SWS standard along with the Maryland Field Guide and the policies in the Maryland Weatherization Program Operations Manual (POM).

When a QA inspection reveals that the LWA QC inspection has failed to meet the standards prescribed by the SWS, HEP QCI training, Maryland Field Guide, and the POM, DHCD will follow a progressive chain of correction to address the failure. Failures to meet the prescribed standards will be categorized as either "Health & Safety" or "General". The action taken will vary depending on the category of the failure.

#### Health & Safety:

1. Any identification of a QC failure that results in a Health and Safety issue will trigger delivery of T&TA for the LWA Inspector who performed the QC inspection. DHCD's QA Inspector will contact the LWA and schedule an on-site T&TA tailored to the issue identified. The issue will be corrected on-site and the correction will be verified by the QA Inspector. The incident will be documented in Hancock.
2. A second identification of a QC failure that compromises Health and Safety will result in additional T&TA to include the principles of the LWA and the other field staff who interacted with the job. The issue will be corrected on-site and the correction will be verified by the QA Inspector. The incident will

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

(Grant Number: EE0006159, State: MD, Program Year: 2015)

be documented in Hancock.

3. If DHCD identifies a third QC failure that compromises Health and Safety within 6 months of the first failure, DHCD will suspend the QC Inspector from performing QC inspections. The issue will be corrected on-site and the correction will be verified by the QA Inspector. The incident will be documented in Hancock. The Subgrantee will be required to provide additional training for the suspended inspector as specified by the QA Inspector.

General:

1. The first QC failure that results in poor work under the "general" measure category will be addressed with a QA "poor" and an email sent through Hancock ordering correction with an additional explanation of the deficiency. The explanation will reference specific sections of the Maryland Field Guide and the POM. The incident will be documented in Hancock.
2. A second occurrence will trigger a T&TA tailored to the specific issue. T&TA will be delivered on-site and will reference specific sections of the Maryland Field Guide and POM. Correction of the deficient work will be verified on-site by the DHCD QA Inspector. The incident will be documented in Hancock.
3. A third occurrence will result in additional T&TA to include the principles of the LWA and the other field staff who interacted with the job. The issue will be corrected on-site and the correction will be verified by the QA Inspector. The incident will be documented in Hancock.
4. A fourth occurrence of a poor QA will lead to suspension of the QC Inspector. The issue will be corrected on-site and verified by the QA Inspector. The incident will be documented in Hancock. The Subgrantee will be required to provide additional training for the suspended QC Inspector as specified by the QA Inspector.

#### V.6 Weatherization Analysis of Effectiveness

DHCD analyzes the effectiveness of weatherization measures performed by the Network Partners in these ways: The effectiveness of the local agency is assessed on their ability to meet production goals, pass QA inspection without reoccurring "Poor" ratings, produce accurate quarterly financial reports, effectively use the HEAT and Hancock tools, and by a compilation of data obtained by annual State monitoring visits to review local agency administrative, programmatic and quality control inspection activities.

These are assessed using these formats and compiling results in an ongoing effort to determine program effectiveness..

Quarterly reporting deliverables and discussion between DHCD Fiscal and Sr. Management and individual partners including:

- Expenses by each fund source,
- Average cost per unit (ACPU),
- Administration and Program expenses,
- Health and Safety average,
- Number and dollar amount of projects in the pipeline,
- Projections for monthly production for the next quarter,
- Financial reports including the General Ledger.

Weekly reviews at HBEP staff meetings on LWA current status on these items:

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**  
**(Grant Number: EE0006159, State: MD, Program Year: 2015)**

- Quality Assurance results and T&TA visits
- Partner capacity and ability to meet production goals,
- Consistency in the use and continuous update the HEAT and Hancock tools,
- the percentage of contracted funds expended,
- high levels of Subgrantee staff turnover

Monthly reporting for MD State Stat covering: Production, T&TA visits numbers, "Poors", Units completed

Annual State monitoring visits as referenced in the monitoring section:

- DHCD will conduct comprehensive monitoring of each local agency at least once a year using the most up to date DOE Monitoring Guidelines and Checklist. The comprehensive monitoring visit will include review of:
  - Client files
  - Fiscal record management and A-133 audit review
  - Energy Audits/Work Orders,
- Program coherence (including compliance with 10CFR440, 10CFR600, 2CFR200, relevant OMB circulars and Weatherization Program Notices),
- Subgrantees records including Procurement, Regulation, Insurance, Inventory and Report files, Inspection of at least 5 percent of the completed units or up to 10% when including units in the process of being weatherized.
- The Subgrantee will be briefed on the observations and findings generated by the monitoring visit while onsite, and DHCD will provide a written assessment of the monitoring process to the Subgrantee within 30 days, along with recommended next steps or corrective action if needed. Part of the findings or recommendations from the monitoring visit may include provision of technical assistance, additional recommendations for training and additional guidance and oversight related to fiscal record-keeping and processes. Any Subgrantees who receive a monitoring report with findings or recommendations for additional training will be contacted for a follow-up monitoring visit by the WAP Senior Program Manager. Subsequent monitoring visits or technical assistance visits will be provided on a regular basis until any outstanding issues have been resolved.

## **V.7 Health and Safety**

### **Health and Safety Plan**

Health and safety issues are a critical component to be included in the auditing protocol used by DHCD's weatherization programs. DHCD regularly assesses new health and safety regulations and training to ensure that weatherization activities do not cause or exacerbate health and safety problems for workers and/or occupants. Allowable energy efficiency-related health and safety actions are those actions necessary to maintaining the physical well-being of both the occupants and/or weatherization workers where:

- Costs are reasonable AND
- The actions must be taken to effectively perform weatherization work; OR
- The actions are necessary as a result of weatherization work.

Health and safety measures are allowed to be conducted only where energy efficiency measures are identified for installation. We need to ask:

- What must we do within reasonable costs to get the home to a point we can go forward with weatherizing, where the weatherization work will be lasting and effective?

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0006159, State: MD, Program Year: 2015)**

- What must we do to ensure that the weatherization work we conduct does not create a health or safety problem for the occupant?

**Health & Safety Budget Calculation Methodology**

Hancock ran a script to identify all the Health & Safety measures installed and number of jobs per measure in calendar year (CY) 2014. From that, average cost per measure was determined. To find a weighted average, the number of jobs per measure was compared to the total jobs. This established the weighted cost of each measure for all jobs. The total weighted cost (\$365.25) was multiplied by the total proposed number of jobs (482). The total is \$ 176,051. Please see the attached table for details.

Based on the anticipated increase in the number of installations of exhaust fans and other measures, in order to be in compliance with ASHRAE 62.2 2013, additional funds are requested. It is estimated that the additional cost will be approximately \$300 per unit (the average cost of installation of bath exhaust fans alone in CY 2014 was \$240.84) multiplied by number of units = \$144,600.

The total anticipated budget is \$320,651.

Not all observed health and safety conditions need to be corrected in order to proceed with weatherization; however, the client will still be notified of any observed conditions and if the condition is not corrected, it should be clearly explained in the client's electronic file in Hancock how the condition is not related to the planned weatherization work.

DHCD's Health and Safety Plan includes documentation requirements should Health and Safety resolution make it cost-prohibitive and cause a deferral. A completed Deferral Form with the reasons that the unit cannot be weatherized **MUST BE** completed by the Energy Auditor and **SIGNED** by BOTH the Client and the Auditor to make certain the Client is informed of their rights and options. Every deferral form must be uploaded in Hancock and an Inspector notified.

All measures identified in the H&S Plan are allowable H&S costs in accordance with WPN 11-6. However, a measure is charged as an ECM where it meets an SIR of 1.1. DHCD will monitor the use of H&S educational literature during Quality Assurance Inspections and Subgrantee programmatic monitoring.

- Air Conditioning and Heating Systems – Red tagged, inoperable or nonexistent heating systems replacement, repair or installation is allowed when it meets an SIR of 1.1. If an SIR of 1.1 is not attainable then other funds may be leveraged. Many furnaces may not be included in the overall measures. Furnaces and/or air conditioning system replacement, repair or installation will be considered in homes occupied by at risk occupants when climate conditions are warranted and when other funds are leveraged. According to recent NOAA data, Cooling Degree Days (CDD) for Baltimore Washington International (BWI) Airport ranged from 1084 CDD in 2014 to 1742 CDD in 2010.
  - o The local agency will provide client education to discuss and provide written information on the appropriate use and maintenance of the units and proper disposal of bulk fuel tanks when not removed.
- Asbestos - General asbestos removal is not an approved health and safety weatherization cost. Every crew member will have taken the required "Asbestos Awareness" class so that workers are protected by inadvertent exposure to this hazard. Major asbestos problems should be referred to the appropriate state agency and/or the Environmental Protection Agency (EPA). Vermiculite must be assumed to contain asbestos and not disturbed other than testing performed by an AHERA certified tester. Partial weatherization is not an option when asbestos containing vermiculite is present. Asbestos on pipes may be removed by an AHERA certified professional but this may be cost prohibitive. In cases where it is not cost-effective to abate the asbestos a home should be deferred. Documentation will include cost estimates to remove the asbestos and photographic evidence.
  - o Client will be informed that suspected asbestos is present and instructed to not disturb material containing asbestos. If suspected asbestos is present, the client will be provided U.S. EPA's "Learn About Asbestos" and "Asbestos, Protect Your Family". The documents can be found at <http://www2.epa.gov/asbestos>.
- Appliances – Neither EmPower, LIEEP nor DOE WAP funds can be used to replace a cook stove. If a cook stove is deemed a health and safety hazard (i.e. fire hazard or excess carbon monoxide) the cook stove may be cleaned and tuned with DOE WAP funds only. If the clean and tune does not resolve the issue, the house must be deferred as a "CO Spillage" case. The CO analyzer used by Maryland's LWAs and SWCs has the capability of identifying CO presence. Acceptable operating standards can be found in the BPI Technical Standards. Replacement of water heaters is allowed on a case-by-case basis with approval from DHCD. Repair and cleaning are allowed. Determine whether the appliances/water heaters are operating safely. Issues related to leaking units, combustion safety, electrical concerns, and other conditions leading to water heater failure should be assessed and documented. If it is not cost-effective to replace the unit within the H&S budget, and the hazard cannot be resolved, the home should be deferred until an additional community funding source can resolve the unit failure. Documentation for denial should include test results and/or photos supporting the visual inspection.
  - o Client will be immediately informed of the condition and be informed of the safety hazard. If applicable, carbon monoxide literature will be



U.S. Department of Energy  
WEATHERIZATION ASSISTANCE PROGRAM (WAP)  
STATE PLAN/MASTER FILE WORKSHEET

(Grant Number: EE0006159, State: MD, Program Year: 2015)

provided. The agency will provide either the US EPA document "Protect Your Family and Yourself from Carbon Monoxide Poisoning" located at [www.epa.gov/iaq/pdfs/co\\_factsheet\\_en.pdf](http://www.epa.gov/iaq/pdfs/co_factsheet_en.pdf), or the Center for Disease Control's "What is Carbon Monoxide?", Located at [www.cdc.gov/co/pdfs/faqs.pdf](http://www.cdc.gov/co/pdfs/faqs.pdf), or both.

- **Biologicals and Unsanitary Conditions** – Small occurrences (less than 10 total square feet) may be addressed using DOE funds under MD WAP during the normal course of weatherization activities. Work must be approved prior to starting. Approval will be granted on a case by case basis. Removal of mold, odors, viruses, bacteria, unsanitary (including raw sewage) conditions, and rotting wood is not a Weatherization responsibility; however, program workers frequently encounter these conditions. DHCD's required "Asbestos Awareness", "Mold Identification", and "Weatherization Tactics" courses allow workers to identify these problems and effect safe work practices. The decision on next steps to remediate these issues begins with the BPI certified auditor, and the determination if a Remediation Specialist, or other Hazardous materials removal specialist specific to the issue, should be involved. Other considerations include identifying the cause of the issue (moisture, etc.). Health and Safety funds may be used if the source of these conditions is identified and can be resolved to allow effective weatherization work and/or to assure the immediate or future health of workers and clients. Caution should be taken when selecting air tightness limits for dwellings with these problems. Since these conditions are often related to moisture, the Auditor should assess moisture conditions as a part of the initial audit procedure and treat them as part of the weatherization work. If necessary, weatherization services may need to be delayed until the problem can be referred to another agency that can take remedial action. In cases where a known biological agent is present and may create a serious risk to occupants or weatherization crews/contractors, the home should be deferred and the homeowner immediately alerted to the risk. Documentation will include written notes by the auditor as well as photographic evidence supporting the visual inspection.

- o Client will be immediately alerted to the risk.

- **Drainage** – Sump-pumps will be repaired or replaced as necessary to prevent water and moisture from damaging the dwelling. Costs within the H&S allowance are permitted under MD WAP using DOE funds. Properly operating sump-pumps will reduce the health risks from the build-up of mold and mildew within the structure. Major drainage issues are beyond the scope of the WAP. Homes with conditions that may create a serious health concern that require more than IRM (DOE) shall be deferred. Visual inspection and observation by the BPI Certified Auditor shall be the primary mechanism for detecting drainage issues. Plumbing or Waterproofing specialists may be consulted to determine scope of remediation. If necessary, weatherization services may need to be delayed until the problem can be referred to another agency that can take remedial action. Documentation for deferral should include notes of the visual inspections, diagrams of the visual inspection, photographic evidence to support the visual inspection, and costs estimates to alleviate major drainage issues.

- o Client will be informed of the presence and location of mold. The client will be provided the US EPA's "A Brief Guide to Mold and Moisture and Your Home". The document can be found at [www.epa.gov/mold/pdfs/moldguide.pdf](http://www.epa.gov/mold/pdfs/moldguide.pdf).

- **Formaldehyde and Volatile Organic Compounds (VOCs)** – The cost for removal is not an allowable cost under MD WAP. The required Weatherization Tactics and OSHA 10 courses instruct all workers on the nature and identification of VOC's. Removal of pollutants should be done by the client or a contracted professional, prior to weatherization work being performed. If pollutants pose a risk to workers and removal cannot be performed by a professional or the client refuses to remove the pollutants, the unit should be deferred. Visual and sensory inspection is the primary mechanism for determining the hazards of VOCs and other air pollutants. Documentation for deferral will include notes of the inspections and photographic evidence to support the inspections.

- o Client will be made aware of condition. Client will be provided the US EPA "Care for Your Air: A Guide to Indoor Air Quality". The document can be found at [www.epa.gov/iaq/pdfs/careforyourair.pdf](http://www.epa.gov/iaq/pdfs/careforyourair.pdf).

- **Injury Prevention of Occupants and Weatherization Workers** – The DHCD reminds LWA representatives that Weatherization staff will attend the OSHA 10 or OSHA 30 General Construction Worker course. As part of the safety for crew and auditors, the course will identify health and safety hazards according the OSHA method "Focus Four" which includes electrical, fall protection, caught in and between, and struck-by hazards. If these hazards cannot be remedied prior to the installation of ECMs, the unit should be deferred. Visual inspection is the primary mechanism for OSHA. Documentation for deferral will include notes of the visual inspections and photographic evidence to support the visual inspection of the OSHA hazards.

- o Client will be made aware of the safety hazards.

- **Occupant Preexisting or Potential Health Conditions** - Agencies should be aware that some individuals' health problems could be exacerbated by weatherization activities. During the initial visit to the home, Energy Auditors are required to discuss with the homeowner the work that will be done during the audit and during installation, including detail regarding materials and installation procedures. The auditor will allow the occupant to identify any preexisting health conditions or concerns that could be exacerbated by the audit or work and note it on the audit. The Energy Auditor will plan to address any preexisting health conditions or concerns through isolation or work tasks, temporary occupant relocation, or deferral in extreme cases. Occupant revealed health concerns or conditions will be noted on the audit form as necessary to direct installation staff to isolate work or use alternate methods. Weatherization processes and potential impacts should be explained to the owner with consideration of any health issues. If the occupant determines that the weatherization work will cause undue stress on an existing condition, the house will be deferred. Documentation includes the

U.S. Department of Energy  
WEATHERIZATION ASSISTANCE PROGRAM (WAP)  
STATE PLAN/MASTER FILE WORKSHEET

(Grant Number: EE0006159, State: MD, Program Year: 2015)

homeowners concerns and signature on the Deferral form.

o Client will be provided information on any known risks.

• Pests - Pest removal is allowed to be funded using DOE H&S funds, under MD WAP, only where infestation would prevent weatherization, poses a health and safety concern for workers, and can be managed within Health and Safety funding parameters. Screening of windows and points of access is allowed to prevent intrusion. Infestation of pests may be cause for deferral where it cannot be reasonably removed. Documentation for deferral will include notes of the visual and sensory inspections, as well as photographic evidence to support the inspection. The client file will also include cost estimates for the removal of the pests from a Pest Removal specialist.

o Inform client of observed conditions and associated risks.

• Fire Hazards - Correcting fire hazards is an allowable expense under MD WAP, using DOE funds, when correcting the hazard will allow weatherization and the cost is within the H&S allowance. Approval is required before starting work. Clients, occupants, and building owners/landlords will be notified in writing of potential fire hazards identified during the initial inspection performed by the Auditor, and advised to bring in a specialist on the identified hazard immediately (electrician for example.). Visual inspection is the primary mechanism for determining the fire hazard. If the fire hazard is within the range of the BPI Technical Standards, the Auditor can ask the homeowner to resolve the issue (gas cans by furnace, etc.). For any other instance, the house must be deferred until the hazard has been resolved. Documentation for deferral will include notes of the visual inspections, diagrams of the visual inspection, photographic evidence to support the visual inspection of the fire hazards.

o Inform client of identified fire hazards. Provide the client with the U.S. Fire Administration's "Home Fire Safety Checklist". This document can be found at [http://www.usfa.fema.gov/downloads/fief/handouts/fief\\_home\\_fire\\_safety\\_checklist.pdf](http://www.usfa.fema.gov/downloads/fief/handouts/fief_home_fire_safety_checklist.pdf).

• Radon - Where there is a previously identified radon problem, work that would exacerbate this problem will not be allowed. Radon abatement is not an allowable activity under DHCD's weatherization programs. Major radon problems should be referred to the appropriate local environmental organization or agency for mitigation or abatement.

o Client will be informed of the hazards of radon and a client with a previously identified radon problem will be provided the US EPA's "Consumers Guide to Radon". This document can be found at [www.epa.gov/radon/pdfs/citizensguide.pdf](http://www.epa.gov/radon/pdfs/citizensguide.pdf).

• Refrigerant - The replacement of refrigerators, air conditioners and any other appliances containing refrigerant requires agencies to follow the Clean Air Act 1990, section 608, as amended by 40 CFR82, 5/14/93.

o Client will be informed to not disturb the refrigerant.

• Smoke, Carbon Monoxide Detectors and Fire Extinguishers - Installation of smoke/CO detectors is allowed where detectors are not present or are inoperable. There will be one smoke/CO detector per floor. Replacement of operable smoke/CO detectors is not an allowable cost. Providing fire extinguishers is allowed only when solid fuels are present.

o The local agency will provide client with verbal and written educational information on the use and location of the smoke/CO detectors.

• Spray Polyurethane Foam (SPF) - Use EPA recommendations (available online at: [http://www.epa.gov/dfe/pubs/projects/spf/spray\\_polyurethane\\_foam.html](http://www.epa.gov/dfe/pubs/projects/spf/spray_polyurethane_foam.html)) when working within the conditioned space or when SPF fumes become evident within the conditioned space. The EPA has expressed the following on SPF application:

Spray polyurethane foam (SPF) is a widely used and highly-effective insulator and sealant; however, eye, skin, and inhalation exposures to its key ingredient, isocyanates, and other chemicals in SPF products of concern in vapors, aerosols, and dusts during SPF installation can cause:

- o Asthma, a potentially life-threatening disease
- o Lung damage, Respiratory problems and other breathing difficulties
- o Skin and eye irritation
- o Other potential adverse health effects

During SPF installation, residents and other unprotected building occupants should vacate the premises until after the foam is applied, cured, trimmed, and the area has been thoroughly cleaned to eliminate any residual isocyanates and ventilated. Some manufacturers recommend 23 to 72 hours before re-occupancy for two-component applications and 6 to 12 hours for one component foam applications, but re-entry time is dependent on product

U.S. Department of Energy  
WEATHERIZATION ASSISTANCE PROGRAM (WAP)  
STATE PLAN/MASTER FILE WORKSHEET

(Grant Number: EE0006159, State: MD, Program Year: 2015)

formulation and other factors. When working outside the building envelope, isolate the area where foam will be applied, take precautions so that fumes will not transfer to inside conditioned space, and exhaust fumes outside the home.

- o Client will be informed of the intent to use foam and asked if anyone in the household is known to be sensitive to chemicals. The client will also be informed of the need to vacate the premises for a specified number of hours based on specific manufacturer recommendations.
- Solid Fuel Heating (Wood Stoves and Chimney/Flue Inspection, etc.) - Wood stoves will be allowed as a weatherization protocol for replacement in the event an energy audit supports its replacement and DHCD staff approves the measure. Wood stove installation must be conducted by qualified personnel. Wood stoves that are installed must be certified and labeled by fire and building code officials and the electrical parts must be certified by the Underwriter Laboratory. Wood stoves must meet EPA emission standards or local standards if they are stricter. Local agencies must obtain appropriate liability insurance. Wood stove installation must be coordinated with the State and County fire marshal to ensure that restrictions and codes are met and that permits are obtained.
- o Local agencies must provide appropriate client education outlining safe operation and maintenance of the stove.
- Electrical Knob and Tube Wiring and Other Wiring - Replacement of a Knob and Tube electrical systems must be within the range of allowable DOE Health and Safety funds, installed by a MD licensed electrician and inspected for code compliance by the applicable local agency. Insulating over or around Knob and Tube Wiring (KTW) will be conducted in accordance to State and National Electric Code (NEC). Insulation will not be permitted over or around KTW unless adequate space is provided to dispel heat generated by the KTW. Minor upgrades and repairs necessary for weatherization measures and where the health or safety of the occupant is at risk is allowed. Sufficient over-current protection must be provided prior to insulating over knob-and-tube wiring. Inspect for the presence and condition of KTW. Check for alterations that may create an electrical hazard. Other than KTW, minor electrical repairs are allowed where health or safety of the occupant is at risk. Upgrades and repairs are allowed when necessary to perform specific weatherization measures. Voltage drop and voltage detection testing are allowed. Documentation for deferral should include notes of the visual inspections, diagrams of the visual inspection, photographic evidence to support the visual inspection, and costs estimates to replace the wiring.
- o Provide client information on over-current protection, overloading circuits and basic electrical safety and risks.
- Space Heaters
- o Vented space heaters will be treated as if they are furnaces.
- o Unvented fossil fuel space heaters must be removed, except as secondary heat where the unit conforms to ANSI Z21.11.2. Auditors should visually inspect all unvented space heaters as well as complete a CO test. In cases where health and safety funding cannot alleviate the problem the home should be deferred. Documentation for deferral will include documentation of the visual inspection (i.e. broken grates, rubber hose) and photographic evidence to support the visual inspection.
- o Client will be informed of safety hazards of unvented fossil fuel heaters. The agency will provide either the U.S. EPA document "Protect Your Family and Yourself from Carbon Monoxide Poisoning" located at [www.epa.gov/iaq/pdfs/co\\_factsheet\\_en.pdf](http://www.epa.gov/iaq/pdfs/co_factsheet_en.pdf), or the Center for Disease Control's "What is Carbon Monoxide?" located at [www.cdc.gov/co/pdfs/faqs.pdf](http://www.cdc.gov/co/pdfs/faqs.pdf), or both.
- Carbon Monoxide Spillage - Carbon Monoxide (CO) is produced anytime fossil fuels are burned to produce heat and the burn is incomplete. There are many circumstances that can cause this situation to occur and the danger of CO spilling into the ambient air of the household is always present. The furnace analyzer used by Maryland's LWAs and SWCs has the capability of identifying CO presence. Acceptable operating standards can be found in the BPI Technical Standards. When dangerous CO levels are present, the LWA or SWC is required to contract a licensed service contractor to visit the home and eliminate the health and safety hazard.
- o Client will be informed of safety hazards of CO. The agency will provide either the U.S. EPA document "Protect Your Family and Yourself from Carbon Monoxide Poisoning" located at [www.epa.gov/iaq/pdfs/co\\_factsheet\\_en.pdf](http://www.epa.gov/iaq/pdfs/co_factsheet_en.pdf), or the Center for Disease Control's "What is Carbon Monoxide?" located at [www.cdc.gov/co/pdfs/faqs.pdf](http://www.cdc.gov/co/pdfs/faqs.pdf), or both.
- Building Structure and Roofing - If the building structure or its mechanical systems, including electrical and plumbing, are in such a state of disrepair that failure is imminent and the conditions cannot be resolved cost-effectively, the home will be deferred. Building rehab is beyond the scope of DHCD's DOE weatherization programs. Homes with conditions that require more than IRMs (DOE WAP) should be deferred. Provide a visual inspection. Documentation for deferral will include notes of the visual inspections, diagrams of the visual inspection, photographic evidence to support the visual inspection, and costs estimates to replace the wiring.
- o Client will be informed of the type and location of the hazard and associated risks.
- Window and Door Replacement - Replacement, repair, or installation of windows or doors is not an allowable health and safety cost but may be

U.S. Department of Energy  
WEATHERIZATION ASSISTANCE PROGRAM (WAP)  
STATE PLAN/MASTER FILE WORKSHEET  
(Grant Number: EE0006159, State: MD, Program Year: 2015)

allowed as an efficiency measure if cost justified and meets SIR guidelines.

- o Client will be informed of proper operation.

- Lead Based Paint Hazards

- o Homes built prior to 1978, and particularly, built before 1950 are very likely to contain lead based paint. The ill effects of lead based paint and lead dust on children under the age of six and pregnant women are well documented. Exposure to lead based paint can lead to learning and developmental disabilities. DHCD follows these procedures when considering weatherizing a home built before 1978.

- o DHCD will require that lead safe work practices are followed by the weatherization crews. DHCD requires energy auditors, crew supervisors and all workers be trained and certified through the Maryland Department of Environment's approved curriculum for lead paint inspectors, supervisors and workers. The training will be in compliance with Environmental Protection Agency (EPA) standards for Lead Renovators; each contractor is required to have and maintain RRP certification. DHCD will work with the local agencies to coordinate and provide the training. Document any lead safe work practices by taking photographs of the work while in process.

- o Weatherization in homes built prior to 1978, where the work disturbs more than two square feet of interior painted space per room or 20 square feet of exterior space, will require that all materials containing lead paint be disposed of properly. This process is not allowed to be handled by weatherization crews.

- o DHCD developed a "deferral" policy from dwellings where funds or crew training are insufficient to weatherize a home in a lead safe work manner. The policy includes procedures for the lead trained and certified energy auditor to determine the need to "defer a house" based on its condition and the nature of the weatherization services needed. Homes deferred service will be referred to the appropriate agency for rehabilitation. Weatherization services may be considered for the homes once lead hazard reduction or abatement occurs.

- o Client will be informed of the hazards of lead paint. Each affected family will be provided with the EPA booklet "The Lead-Safe Certified Guide to Renovate Right" prior to the start of work. Have the client sign and date the confirmation of receipt of the lead pamphlet and keep it in the file. The "Renovate Right" document can be found at [www2.epa.gov/sites/production/files/documents/renovaterightbrochure.pdf](http://www2.epa.gov/sites/production/files/documents/renovaterightbrochure.pdf).

- Energy Related Mold and Moisture - DHCD developed a policy to defer weatherization service when the presence has been confirmed of an identified existence of mold and moisture problems. Weatherization workers at all levels are required to take a mold awareness class. Suspected mold of individual areas less than or equal to 10 square feet are considered minor and weatherization can continue as long as adequate ventilation or dehumidification can be provided and the homeowner is instructed in cleaning the area. Limited water damage repairs that can be addressed by weatherization workers and correction of moisture and mold creating conditions are allowed when necessary in order to weatherize the home and to ensure the long term stability and durability of the measures. The Auditor evaluates the existence of mold and moisture problems which may prevent the weatherization of the home at that time. The LWA or SWC will refer the unit to an appropriate local agency for remedial action before any further weatherization activities are performed. Documentation for deferral will include notes of the visual inspections and photographic evidence to support the visual inspection. In cases where mold like substances have been detected, assessors will include the square footage of the area affected.

- o Client will be informed of the presence and location of mold. The client will be provided the US EPA's "A Brief Guide to Mold and Moisture and Your Home". The document can be found at [www.epa.gov/mold/pdfs/moldguide.pdf](http://www.epa.gov/mold/pdfs/moldguide.pdf).

- Code Compliance - State and Local codes must be followed while installing weatherization measures. Workers must be qualified and adequately trained according to state and local codes specific to the work being conducted (electrical, plumbing, etc.). Correction of pre-existing code compliance issues is not an allowable cost other than where weatherization measures are being conducted. Condemned properties and properties where "red tagged" health and safety conditions exist that cannot be corrected will be deferred. Documentation for deferral will include notes of the visual inspections, diagrams of the visual inspection, and photographic evidence to support the visual inspection.

- o Inform client of observed code compliance issues.

- Ventilation - ASHRAE 62.2-2013 is required to be met to the fullest extent possible when performing weatherization activity. A minimum of 50 CFM exhaust fans are required for full bathrooms and 100 CFM exhaust fans for kitchens. ASHRAE 62.2 training is required for all weatherization field workers and HVAC technicians.

- o Client will be informed of relevant indoor air flow issues. When mechanical ventilation is installed, the local agency will provide client with written educational information about the function, use and maintenance of the ventilation system.

Hazard Communication Program

U.S. Department of Energy  
WEATHERIZATION ASSISTANCE PROGRAM (WAP)  
STATE PLAN/MASTER FILE WORKSHEET  
(Grant Number: EE0006159, State: MD, Program Year: 2015)

**29 CFR 1910.1200 OSHA's Hazard Communication Standard**

<https://www.osha.gov/dsg/hazcom/HCSFinalRegTxt.html>

Maryland Weatherization Program subgrantees must each develop a Hazard Communication Program in compliance with OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

**Purpose:** OSHA's Hazard Communication Standard is designed to insure that all hazardous chemicals in the workplace and on worksites are identified, catalogued and labeled, and that information about the hazards are communicated to employees along with training on steps the employee can take to protect themselves.

**Implementation:** Maryland DHCD will require each subgrantee to produce a Hazard Communication Plan (HCP) that is specific to their workplace and the materials used. The HCP must be shared with employees through comprehensive training. The HCP must remain accessible. Subgrantees are advised to maintain copies in the work place in an accessible location as well as on tucks for access at worksites. The HCP must be reviewed and updated annually. A copy of the HCP must be available to DHCD Monitoring staff upon request. Employees must be able to locate and describe the HCP at the request of DHCD QA Monitors.

This requirement will be issued as a directive and then will be added to the Maryland Weatherization Program Operations Manual (POM). Subgrantees will be allotted 90-days from the time the directive is issued to draft their HCP. The HCP will be submitted to DHCD upon completion.

**Required components of the Hazard Communication Plan (HCP):**

- o Information in the HCP must be consistent with the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).
- o Container labeling and other warning signs for hazardous chemicals in the workplace.
- o Safety Data Sheets (SDS) for all hazardous chemicals in the workplace.
- o Employee training on hazardous chemicals in the workplace.
- o The written HCP must be accessible to employees at the workplace and on the worksite.
- o The written HCP must inform employees of the requirements of 29 CFR 1910.1200.

**Steps to an effective Hazard Communication Plan:** <https://www.osha.gov/Publications/OSHA3696.pdf>

**V.8 Program Management**

**V.8.1 Overview and Organization**

The Weatherization Assistance Program in the State of Maryland is administered by Maryland's Department of Housing and Community Development (DHCD), a cabinet level agency of state government and Maryland's affordable Housing Finance Agency. DHCD's mission is to work with partners to finance housing opportunities and revitalize great places for Maryland citizens to live, work and prosper. Part of this mission involves working to ensure that Maryland citizens have housing that is safe and affordable, in neighborhoods that are vibrant and desirable. DHCD utilizes funding from a variety of State and Federal sources to accomplish this mission, with energy efficiency programs playing a key role in the preservation of affordability and safety in housing.

The Weatherization Assistance Program (WAP) is housed within DHCD's Housing and Building Energy Programs (HBEP), which also administers the EmPOWER Low Income Energy Efficiency Program (LIEEP), a low-income weatherization program similar to WAP that is funded through a ratepayer surcharge for electric customers of Baltimore Gas and Electric, Delmarva Power, Potomac Edison, Pepco, and the Southern Maryland Electric Cooperative. The HBEP unit also administers a market-rate energy efficiency lending program funded through the U.S. Department of Energy's Better Buildings program, and a "Targeted, Enhanced Weatherization Program" for customers in the Baltimore Gas and Electric service territory, funded through the Constellation/Exelon merger settlement. The HBEP unit receives additional funding to support low-income weatherization activities through the Regional Greenhouse Gas Initiative/Strategic Energy Investment Fund (RGGI/SEIF), Low Income Home Energy Assistance Program (LIHEAP) and occasionally from the Federal Energy Regulatory Commission (FERC).

The HBEP unit is overseen by the Director and Deputy Director of DHCD's Division of Development Finance, and operates with an HBEP Director and Deputy Director, a compliance officer, an administrative officer, an administrative assistant, an energy technology officer, a manager for business performance and reporting, an intake team, and a quality assurance inspection team that serve all programs. Also housed within the HBEP unit are the Weatherization Program Senior Manager and Weatherization Program Assistant Senior Manager, who serve both the WAP and EmPOWER LIEEP programs.

The Senior Program Manager and Assistant Senior Manager are two of the following five HBEP staff who provide the management, technical assistance, and

U.S. Department of Energy  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

(Grant Number: EE0006159, State: MD, Program Year: 2015)

administrative support for the program. Specific staff titles and their responsibilities are as follows:

Senior Program Manager – Manages daily operations, manages joint activity of WAP, coordinates monitoring activities, negotiates and resolves program and fiscal audits, establishes program policies and supervises WAP staff.

Assistant Senior Manager - Oversees field operations of the local network, coordinates special training and technical assistance opportunities, implements new technologies and special projects.

Quality Assurance Officer – Conducts quality assurance evaluations, assists in leverage activities and assists in policy development.

Compliance Officer – Assists in the oversight of the program, analyzing data, supervising and accounting for expenditures of subgrantee program fund allocations and ensuring compliance of fiscal program regulations.

Administrative Officer – Operates the contract reimbursement system, performs data entry, updates the database and analyzes WAP activities, compiles federal and state report information, and performs contract processing, procurement and other administrative duties.

#### V.8.2 Administrative Expenditure Limits

No more than 10 percent of the new DOE grant funds will be used to administer the WAP at the state and local levels. Not less than 50 percent of the administrative funds (or 5 percent of the new grant amount) will be provided to local agencies to administer WAP projects. The balance of administrative funds will be used by DHCD to offset allowable administrative expenses. DHCD does not intend to alter administrative allowance to local agencies beyond the limits expressed herein.

#### V.8.3 Monitoring Activities

DHCD staff assesses and supports Subgrantee performance with a partner approach. Thirty percent of the program budget is allotted for these activities:

**Ongoing Field Monitoring and T&TA** - Not including inspection visits, WAP Quality Assurance Inspectors spend 10% of their time providing Training and Technical Assistance to subgrantees. If a subgrantee wishes to verify that their standards are acceptable, if challenges arise in the field, or if workmanship is unsatisfactory, DHCD QA Inspectors can immediately identify and address any issues with the subgrantees through the provision of technical assistance or additional training. Early identification and ongoing support limits unspecified and sudden drops in quality and production, and ensures a workforce that is well trained and producing consistently at a high level.

"Poor" rated units must be scheduled for resolution by subgrantees within five working days. Issues impacting occupant health and safety must be resolved within 24-72 hours, depending on the seriousness of their nature. Subgrantee failure to adhere to this policy could result in the withholding of referrals, back-charges, stopping payment on current invoices and, in extreme cases, suspension or removal from the WAP. DHCD requires that all outstanding "Poor" units be resolved in a timely manner and may request development and implementation of a corrective work plan, additional training, or additional T&TA for the Subgrantee. When DHCD QA Inspectors recognize a trend in units rated "poor", they may request that the subgrantee auditor attend QA Inspections to provide immediate-on-site T&TA with corrective action.

**Program Oversight and Monitoring** - DHCD will conduct comprehensive monitoring of each local agency at least once a year using the most up to date DOE Monitoring Guidelines and Checklist. The comprehensive monitoring visit will include review of:

- Client files
- Fiscal record management and A-133 audit review
- Energy Audits/Work Orders,
- Program coherence (including compliance with 10CFR440, 10CFR600, 2CFR200, relevant OMB circulars and Weatherization Program Notices),
- Subgrantees records including Procurement, Regulation, Insurance, Inventory and Report files,
- nspection of at least 5 percent of the completed units or up to 10% of units when including units in the process of being weatherized.

The Subgrantee will be briefed on the observations and findings generated by the monitoring visit while onsite, and DHCD will provide a written assessment of

U.S. Department of Energy  
WEATHERIZATION ASSISTANCE PROGRAM (WAP)  
STATE PLAN/MASTER FILE WORKSHEET

(Grant Number: EE0006159, State: MD, Program Year: 2015)

the monitoring process to the Subgrantee within 30 days, along with recommended next steps or corrective action if needed. Part of the findings or recommendations from the monitoring visit may include provision of technical assistance, additional recommendations for training and additional guidance and oversight related to fiscal record-keeping and processes. Any Subgrantees who receive a monitoring report with findings or recommendations for additional training will be contacted for a follow-up monitoring visit by the WAP Senior Program Manager. Subsequent monitoring visits or technical assistance visits will be provided on a regular basis until any outstanding issues have been resolved. Noncompliance findings unresolved within forty-five days will be reported to DOE. Sensitive or significant noncompliance findings will be reported to DOE immediately. A detailed review of local agency records and inspections will be maintained by DHCD and be available at the request of DOE.

At the time of these annual monitoring visits, DHCD will summarize and review each Subgrantee's audit, program monitoring reports and findings for internal monitoring of Subgrantee needs, strengths, and weaknesses. The results of this annual monitoring should be considered during annual planning and will be available at DHCD for DOE staff to review during their Grantee program monitoring visits.

Subgrantee failure to adhere to this policy and/or resolve monitoring findings could result in the withholding of referrals, back-charges, stopping payment on current invoices and, in extreme cases, suspension or removal from the WAP.

#### V.8.4 Training and Technical Assistance Approach and Activities

##### 2015 Training & Technical Assistance Plan

The 2015 Maryland Weatherization Network is comprised of LWAs with varying degrees of historical experience performing weatherization and related home renovation and human services. DHCD has conducted a thorough investigation in order to reveal the training and technical assistance needs of both the agencies in the Network and the DHCD team responsible for implementation of DOE's WAP. For the Network, the investigation included an analysis of the results of Quality Assurance Inspections from the last twelve months and a review of applications submitted by LWAs in March of 2015. For DHCD WAP staff, DHCD looked at existing capacity in staff assigned to the program, the depth of experience each staff member has with DOE WAP, and the results of DOE's annual monitoring of DHCD. The following TTA Plan addresses the needs identified. DHCD's standard training requirements dictate that all subgrantees performing weatherization are required to complete certification and non-certification trainings related to the task they perform. These standard technical training requirements have also been included in this TTA Plan.

##### DHCD Staff Training:

DHCD's analysis of program staff capacity revealed immediate training needs in the following areas:

- **Subgrantee Programmatic & Fiscal Monitoring** – DHCD is in the process of procuring a nationally recognized trainer who has ample direct experience with programmatic and fiscal monitoring under DOE WAP. She will provide training to program staff members who are responsible for subgrantee monitoring.
- **QCI – Retraining** – Several DHCD QA Inspectors are in the process of retraining for the QCI. DHCD is working with Baltimore City Community College (BCCC) and their QCI Trainer to deliver remedial training areas of weakness identified by the inspectors' first attempt at QCI training and testing. Retraining will continue formally with classes lead by the BCCC Trainer. Additionally, informal mentor training is taking place between DHCD's QCI certified inspectors and those who require retraining.

The following designates standard position-based training for specific program personnel:

- DHCD Quality Assurance Inspectors must all be certified as HEP Quality Control Inspectors, effective July 1, 2015. Additionally, all must have at least BPI Building Analyst certification, OSHA 30, Lead Inspector and Asbestos Inspector credentialed status.
- DHCD Senior Program Manager is required to have a BPI Building Analyst certification and will be offered training in Advanced Weatherization

U.S. Department of Energy  
WEATHERIZATION ASSISTANCE PROGRAM (WAP)  
STATE PLAN/MASTER FILE WORKSHEET

(Grant Number: EE0006159, State: MD, Program Year: 2015)

Tactics.

On an ongoing basis, program staff attends National Association for State Community Services Program (NASCSPP) conferences for continuing updates in each of their areas of expertise, along with Maryland Community Action Partnership (MCAP), Affordable Comfort, Inc. (ACI), frequent webinar's and industry events. Staff also utilizes programmatic, financial and technical guidance websites such as Weatherization Assistance Program Technical Assistance Center (WAPTAC) and the National Weatherization Training Platform (NWTP).

**Weatherization Network Training and Capacity**

**QCI:** Maryland's Weatherization Network is in the process of becoming QCI certified. QC Inspectors from each LWA are attending training delivered by Baltimore City Community College. QCI training began in March of 2015 through an IREC Accredited Training Provider. Testing began in April 2015. DHCD will reimburse all Quality Control Inspector and Energy Audit personnel from the Subgrantees for the HEP Quality Control Inspector training and testing. DHCD will pay for classes and up to three attempts at testing for each inspector. DHCD fees are covered under our T&TA budget.

As of July 1, 2015, no QC Inspectors or Energy Auditors will be allowed to conduct QC onsite without this credential. Pursuant to WPN 14-4, with this effort, DHCD has set in motion the implementation plan to bring the HEP credentials and SWS objectives into the DOE program.

In the instance that an agency cannot get their staff QCI certified in time to comply with the July 1, 2015 implementation, DHCD will allow a temporary waiver according to the following conditions.

Effective Monday, June 1, 2015, LWAs and SWCs may apply to be temporarily exempted from the requirement that the QC Inspector be employed full time by the LWA/SWC. Application letters must be submitted by June 22, 2015.

Eligible applicant agencies will be agencies that do not, at the time of application, employ personnel certified by the Building Performance Institute as a Home Energy Professional Quality Control Inspector.

The following are required components of an application to be temporarily exempted from DHCD's policy that all QC Inspectors be employed by the LWA/SWC:

- The application letter must identify all QC Inspectors currently on staff and include attached resumes for each.
- The letter must demonstrate, through QC staff resumes, written BPI denial of prerequisites, or evidence of three failed HEP QCI exams, that the agency will not have a Home Energy Professional Quality Control Inspector on staff on July 1, 2015.
- The application letter must outline a plan to secure QCI certified staff by 2/1/2016. The plan should detail efforts to train existing staff or recruit new staffs, who are HEP QCI certified or approved to sit for the exam. Ideally, the plan would describe a mentoring relationship between the QCI certified subcontractor and the LWA / SWC.
- The application letter must identify an individual or entity that will provide QC Inspections as a subcontractor to the LWA/SWC during the period of exemption. Please attach a copy of the QCI certificate and of an agreement between the agency and the subcontractor that acknowledges the subcontractor's knowledge of and willingness to adhere to all relevant policies in the POM and SWS Fields Guide and copies of required certifications and licenses outlined in the POM.

DHCD will review all application letters and approve or deny each, in writing, by July 1, 2015. If granted, the exemption will be a one-time leniency to allow agencies to meet the POM requirement. Exempted agencies will be required to submit a status update at 90-days from the date of exemption that states progress made toward employing a HEP QCI certified Quality Control Inspector.

All agencies must have HEP QCI certified Quality Control Inspectors on staff or have a written exemption from DHCD on July 1, 2015 in order to continue working in Maryland's weatherization programs.

**Standardized Training by Job Task:** To achieve the goal of "standardizing" quality services and maintaining worker safety throughout the State, LWA field staff must attend a standardized set of training sessions that are approved, and in some cases, reimbursed by DHCD. The individual must attend both classroom and laboratory sessions and learn how to investigate and remedy the many aspects of a dwelling unit's construction and its use of energy. Some classes can be taken online, while others must be taken at a facility and can be scheduled directly by the subgrantee. DHCD will schedule classes for all sub grantees. Tier 1 training is reimbursed by DHCD. Before being reimbursed, each program participant must show successful completion of the course with the earned certificate. These certificates are kept on file at DHCD to ensure compliance with training deadlines.

**Task specific training requirements:**

- **Installers shall have**
  - Certification of completion of the DOE/BPI HEP Installer by June 30, 2017



**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

(Grant Number: EE0006159, State: MD, Program Year: 2015)

- certification of weatherization training received 2009 or later that meets the U. S. Department of Energy (DOE) core competencies,
- certification of EPA Lead Repair Renovation and Painting (LRRP) training, and
- an Occupational Safety and Health Administration issued 10-hour Construction Safety certification card.
- **Crew Leaders shall have**
  - Certification of completion of the DOE/BPI HEP Crew Leader by June 30, 2017
  - certification of weatherization training received 2009 or later that meets the U. S. Department of Energy (DOE) core competencies,
  - certification of EPA Lead Repair Renovation and Painting (LRRP) training, and
  - an Occupational Safety and Health Administration issued 10-hour Construction Safety certification card.
- **Energy Auditors shall have**
  - Certification of completion of the DOE/BPI HEP Energy Auditor by June 30, 2016
  - Building Analyst Professional or Envelope Professional Certification from the Building Performance Institute, Inc. (BPI).
  - certification of weatherization training received 2009 or later that meets the U. S. Department of Energy (DOE) core competencies,
  - certification of EPA Lead Repair Renovation and Painting (LRRP) training, and
  - an Occupational Safety and Health Administration issued 10-hour Construction Safety certification card.
- **Quality Control Inspectors shall have**
  - Certification of completion of the DOE/BPI HEP QCI
  - Building Analyst Professional or Envelope Professional Certification from the Building Performance Institute, Inc. (BPI).
  - certification of weatherization training received 2009 or later that meets the U. S. Department of Energy (DOE) core competencies,
  - certification of EPA Lead Repair Renovation and Painting (LRRP) training, and
  - an Occupational Safety and Health Administration issued 10-hour Construction Safety certification card.

**Tier 2 training:** Tier two training covers specific challenging issues identified by DHCD Quality Assurance Inspector (QAI) monitoring or by network partners themselves. These are available on an as-needed basis. For example, one week courses on combustion safety were provided by DHCD through a local community college in January 2015.

**Field TTA:** In addition to classroom training, DHCD spends a significant amount of time on Training and Technical Assistance in the field. Quality Assurance Inspectors meet regularly on-site with subgrantees to provide hands-on training and support for weatherization measures installation and standards, and comprehensive energy audit advice. References such as BPI protocols, the Maryland DHCD 2015 Field Guide, the Standard Weatherization Specifications, and the POM are all used in a working format.

**Hancock Energy Software / HEAT:** Successfully using the Hancock/HEAT system is a key component to being a successful subgrantee within the program. DHCD has an in-house Energy Technology Officer who is available to troubleshoot process issues, and provide on-site trainings year round to ensure accurate and efficient use of Hancock.

## V.9 Energy Crisis and Disaster Plan

The purpose of Maryland's Department of Energy (DOE) disaster planning and relief is to provide emergency services to low-income individuals and families affected by a disaster as determined by a Presidential or Gubernatorial order declaring either a Federal or State Emergency. DOE WAP has a very limited role in any disaster response. Funds are limited to eligible weatherization activities and the purchase and delivery of weatherization materials.

To the extent that services are in support of eligible weatherization (or permissible re-weatherization) work for eligible households, such expenditure is allowable. Allowable expenditures include:

- The cost of incidental repairs to an eligible dwelling unit if such repairs are necessary to make the installation of weatherization materials effective.
- The cost of eliminating health and safety hazards, elimination of which is necessary before the installation of weatherization materials.
- The cost to perform functions related to protecting the DOE investment such as:
  - Weatherization materials, tools, equipment, weatherization vehicles, or protection of Subgrantee weatherization files, records and the like during the initial phase of the disaster response.
- The cost to use weatherization vehicles and/or equipment to help assist in the disaster relief provided DOE is reimbursed according to the DOE Financial Assistance Regulations 10 CFR Part 600.

The use of DOE funds for relief efforts is limited by the following:

- The total allowance for relief efforts is limited to a maximum allowance of \$6,500 per dwelling unit.
- The total allowance for incidental repairs in support of the installation of weatherization materials is limited to the current standard of overall job savings to

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0006159, State: MD, Program Year: 2015)**

investment ratio (SIR) of 1.1 or higher.

- The total allowance for the installation of each weatherization measure is limited to the current maximum reimbursement per ACPU.
- The cost to pay for weatherization personnel to perform relief work in the community as a result of a disaster is not allowable.

Prioritization of weatherization requests within disaster:

- Disaster relief services are only available to qualified low-income households directly affected by the declared disaster. DOE requires that priority be given to identifying and providing weatherization services to the elderly, disabled, families with children, high residential energy users and households with high energy burdens.
- It is permissible, however, to consider households located in the disaster area as a priority as long as the households are eligible and meet one of the priorities above and are free and clear of any insurance claim or other form of compensation resulting from damage incurred from the disaster.